DOCUMENT RESUME

ED 260 747 JC 850 459

AUTHOR	Brooks, Walter L.; And Others
TITLE	Using Student Performance in Planning.
INSTITUTION	Arce-Brooks Consultants, Sacramento, CA.
SPONS AGENCY	California Community Colleges, Sacramento. Office of the Chancellor.
PUB DATE	Jun 84
NOTE	200p.
PUB TYPE	Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Academic Achievement; *College Planning; Community Colleges; *Data Collection; Followup Studies; Outcomes of Education; *Program Effectiveness; Program Evaluation; Two Year Colleges; *Vocational Followup
IDENTIFIERS	*California; *Vocational Education Data System

ABSTRACT

A study was undertaken to improve the quality of student follow-up data submitted by the California community colleges in compliance with federal Vocational Education Data System (VEDS) reporting requirements. The objectives of the study were to conduct a follow-up of vocational education students from 14 community colleges, standardizing data collection methods and definitions; to assist community college vocational administrators in developing a plan for using study data; and to provide technical assistance to colleges in meeting VEDS requirements. Study procedures included a review of the college catalogs and class schedules of 14 selected colleges; an in-class survey of occupational students; the development of a student follow-up survey instrument; and the conduct of follow-up studies by the individual colleges. Study findings demonstrated that the quality of data collected through the VEDS could be enhanced by attending to college information needs and providing coordination among colleges involved in follow-up activity. Background material, assumptions, detailed procedures, and a bibliography are included. Appendices include an occupational skills and knowledge list, information on follow-up procedures and instruments, summary follow-up data, and estimated costs. (Author/EJV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

BEST COPY AVAILABLE

ED260747

USING STUDENT PERFORMANCE IN PLANNING

This Study was Sponsored by
The Chancellor's Office
California Community Colleges

P.L. 94-482, Title II, Part A

Dr. William Morris, Project Monitor

Walter L. Brooks
Project Director

Arce-Brooks Consultants
Institutional Research

JC 850 459

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

June, 1984

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
W. MORRIS

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TABLE OF CONTENTS

Acknowledgements.................................... ii

Participating Colleges.............................. v

Executive Summary................................... 1

Background.. 6

Purpose... 8

Assumptions... 9

Procedure... 11

    Selection of Colleges........................... 11

    Occupational Program Definition................. 12

    Occupational Course Identification.............. 14

    Classroom Survey Procedures..................... 15

    Employment Survey Procedures.................... 17

    Follow-Up Questionnaire Development............. 18

    Employment Survey............................... 20

    Results... 21

    Reports to Colleges............................. 26

    Recommendations................................. 28

    Conclusion...................................... 31

Bibliography.. 32

Appendices

    Occupational Skills and Knowledge List.......... A

    Follow-up Procedures, Instruments, and Definitions.. B

    Summary Follow-up Information - All Students.... C

    Summary Follow-up Information - Completers...... D

    Summary Follow-up Information - Leavers......... E

    Estimated Cost of Student Follow-up............. F

Acknowledgements

We would like to thank the Community College Chancellor's Office Occupational Education Staff who had the courage to invite college representative in to assist in revamping their reporting structure knowing full well that most of those who were invited to assist in improving the system would rather see it abolished.

We have received superb cooperation from the college staff at all fourteen colleges that participated in this project but several people deserve special note:

Dr. Greg Ohanneson, District Vocational Education Director for the San Jose Community College District, has made a significant contributed to both the design and implementation of this study. He is at least as well acquainted with the project as the project director.

Henry Gronroos, the Associate Dean for Occupational Education at Santa Rosa Junior College, has made an equal contribution. Henry's close contact with the college staff has given us an excellent opportunity for to evaluate our instruments and procedures from the perspective of the vocational instructor.

Ken Jackson, the Associate Director for Vocational/Technical Education, at Contra Costa College has been most helpful. In the beginning, when we were not sure of our direction, Ken was. He was most helpful in getting the support of colleges for the project and providing encouragement when we needed it.

Several college staff members have made contributions to the development and testing of the procedures used in this study. They include Evelyn Patterson, Ken Jacksons assistant from Contra Costa College, who coordinated project activities on the Contra Costa College campus and made many helpful suggestions in the development of procedures.

Both Gerry Abeil, from American River College and Lorraine McCadden, from Citrus College, have conducted very effective vocational student follow-up studies at their colleges for many years. They were most helpful in suggesting changes which greatly improved our planning.

Ken Knowlton and his assistant, Pam Gerber from Rio Hondo College made our task there easy and congenial. Although we stumbled through an attempt to contact former apprentices, we did learned a great deal from the effort.

Stanley Viltz, the Vocational Administrator at East Los Angeles College was most helpful in getting things done at East. Don Chase at West Los Angeles, and John Farhood after Don's Retirement, were extremely cooperative.

Mary Meiner, the Work Experience Coordinator for San Diego Miramar, took charge on that campus and carried the project for us in San Diego.

Milt Boyer the Vocational Administrator/Evening College Administrator/Chico Center Administrator at Butte College, who involved his instructional managers in the project and found people to help out distributing questionnaires and telephoning on short notice.

Dr. Les Mc Mcabe at Merced College who had "never seen a follow-up study yet that was worth anything" agreed to put his skepticism away and participate in the project. When he did, one could not ask for more cooperation and support from anyone.

Dr. Jack Fujimoto, President of West Los Angeles College, gave us the chief administrators perspective on the collection and use of follow-up data keeping us aware of the probable impact on the entire college of the information we are trying to obtain.

Fred Obermiller, the Vocational Administrator from College of the Siskiyous, gave us complete support. It was important to have a small, rural college offering courses in many off-campus locations involved in the project.

Dr. Ben Gold acted as the chief consultant to the project. His background in developing the Student Accountability Manual gave this project the necessary continuity with previous work in the development of the California Community College's Vocational education Data System. Dr. Gold reviewed all source documents, procedures, and report formats used in the study. Dr. Gold also met with the instructional staff at most of the colleges to discuss their ideas on the information which should be sought in our contact with former students.

Denise Holder, the Campus Coordinator for the project and my right arm, assisted in the development of procedure for the distribution and collection of the Classroom Questionnaire and then, smoothly and efficiently, carried them out. After Denise dropped out to have her baby, things were never quite as organized.

Jan Dennis-Rounds, Research Officer from Cerritos College, synthesized the staff input from the participating colleges which became the "Skills and Knowledge" section of the student follow-up questionnaire. Jan was also responsible for the development of the standardized follow-up telephone interview used in contacting former students and employers.

I suppose that it is appropriate to name last those people who had the most important influence on the direction and character of the project. My partner in this effort, Eve-Marie Arce, managed to strech a bare bones budget to cover the cost of most of the project activities and still found time to colaborated in the development of the source documents, the procedures, and the concepts introduced in the course of the project.

There is a tendency for those of us who have attempted to add something to the vocational evaluation system of California's Community Colleges to begin to think of it as "ours". It really isn't. As an evaluation system, it is the product of one man, Dr. William Morris, Evaluations Specialist for the California Community Colleges. Through the sweeping changes in both staff and priorities which have occured at the Chancellor's Office over the past ten years, Bill has somehow managed to keep sight of the need for an evaluation system which has as its basic goal better instructional programs for students. We hope that at least some part of this experimental effort will contribute to the achievement of that goal.

Walter L. Brooks

Project Director

Participating Colleges

American River College

Butte College

Cerritos College

Citrus College

College of the Siskiyous

Contra Costa College

East Los Angeles College

Evergreen Valley College

Merced College

Rio Hondo College

San Diego Miramar College

San Jose City College

Santa Rosa Junior College

West Los Angeles College

USING STUDENT PERFORMANCE IN PLANNING

EXECUTIVE SUMMARY

The Federal Vocational Education Act of 1976 carried with it provisions for States to report information on the job status of former students of public vocational training programs. The National Center for Educational Statistics (NCES) was charged with the responsibility for developing a reporting system to fulfill this requirement of the Act. In 1978, the National Center for Educational Statistics' Vocational Education Data System (VEDS) was mandated as the reporting vehicle superseding existing state and local accountability procedures.

When the VEDS reporting requirements became known in 1978, the California Community College Chancellor's Office staff set about to revise the existing Student Accounting Manual (SAM) to comply with VEDS guidelines. In spite of the efforts of the Chancellor's Office to effect a smooth transition to the new reporting system, community colleges have experienced great difficulty in adapting to VEDS.

Procedure

Selection of Colleges - Thirteen colleges, one half of VEA Report Group III, were identified through a random selection procedure for inclusion in this study. An evaluation of the colleges in terms of three geographic variables demonstrated that colleges did not vary significantly from the 106 California Community Colleges within the State System. One substitution was made from the original list of colleges. A fourteenth college was added to allow participation of both college in a multi-campus district.

Review of the College Catalog - Occupational programs offered by the college were initially identified by a review of the college catalog. All course sequence listings which were described by the catalog as leading to employment or designed to improve the skills of those already employed were included in the list. The program list was then reviewed by the occupational administrator for the college. Inactive programs were deleted from the list. A Taxonomy of Program (TOP) code was assigned to each program. The TOP code, the catalog title for the program, and up to sixteen of the courses associated with the program were then entered into a computerized data file. A total of 472 occupational programs were identified from college catalogs in this manner. A total of 140 unduplicated TOP Program Codes, or TOP Program options were recorded.

Review of the College Schedule of Classes - The published listing of classes for the Fall term, 1982 was obtained from each of the colleges and reviewed by the project staff. Classes associated with each of the occupational programs offered by the college were identified. A Student Accountability Manual (SAM) code was assigned by project staff to each of the classes and reviewed by the occupational administrator. Where differences of opinion on the appropriate code occurred, codes were reviewed and modified with the college occupational administrator making the final judgment. Occupational classes were then entered into a computerized course record containing class information necessary to identify the class (course number and title), describe its function within the occupational curriculum (TOP and SAM codes), and locate it (room number or off-campus site code).

Classroom Questionnaire - A questionnaire was developed for use in occupational classes. (See Appendix B) This survey instrument was intended to accomplish four objectives:

1) to obtain an address where the student might be reached after leaving the college;

2) to alert the student to the follow-up activities which would take place;

3) to obtain student data which has proven to be difficult to obtain using other methods (sex and ethnic data);

4) and to determine the student's employment status.

The Classroom Questionnaire was administered in all intermediate and advanced occupational classes (classes given a SAM Code of "C" or "B"). The information gathered through the classroom survey was entered into a computerized data file initiating a student follow-up record.

Student Follow-Up Survey - Employment questions required by the Vocational Education Data System were revised and formatted on an 8 1/2 by 11 form. The reverse side of the questionnaire was used to identify the student and to evaluate the occupational program.

In addition to the required employment questions, program program evaluation questions unique to the college program were included on the student follow-up questionnaire. To accomplish this, workshops were scheduled at twelve of the fourteen colleges to assist in the development of skills lists and to inform staff of the project. Time constraints did not allow for the scheduling of workshops on the remaining college campuses and staff were informed of the project by the campus occupational administrator.

During the workshops , college instructional staff and administrative were encouraged to assist in developing the student follow-up questionnaire which would be used to contact former students trained by the program which they managed or in which they taught.

In the workshops, the vehicle used to accomplish participation by college staff was a list of "Skills and Knowledge" which might be gained by the student through the instructional program. Lists were initially submitted for about half of the programs the colleges offered. When a list was not submitted, project staff abstracted such a list from course descriptions in the college catalog and submitted the list to the college instructional staff for review.

This activity produced a list, limited to sixteen items, which was intended to described essential "skills and knowledge" which the vocational program was intended to teach. The list was entered into the computerized program data file for each of the unique 140 TOP Programs identified in the college catalogs.

Results

The primary purpose of this study was to develop procedures for the acquisition of data and not the analysis of the data gathered. Report generated by the study were in the format required by the National Center For Educational Statistics Student Completer Follow-up Report, 2404A-7A. The report, which follows NCES guidelines, has been submitted to the Chancellors Office staff in compliance with the contract specifications and NCES reporting requirements.

The data submitted to the Chancellor's Office staff is also maintained on a computerized data file allowing further analysis. Some highlights of the report:

No college experienced a return rate of less than 52%; the return rate for all colleges was 65%

Most of the students enrolled in intermediate and advanced occupational classes were found to be enrolled for employment reasons:

forty-one percent were found to be taking classes to begin a new career;

thirty-one percent were taking classes to seek a better job in the same occupational area, or maintain a license;

twelve percent indicated that they planned to transfer to a four year college;

only twelve percent of the students were enrolled in classes for a non-occupational reason.

The study demonstrates a clear relationship between the level of classroom achievement and future job status. Within six months after leaving college, it was found that:

sixty percent of the students who had completed a degree or certificate in an occupational program were employed in a job related to college classes ;

forty-five percent of the students who had completed one or more advanced occupational classes in an occupational program but had not received a degree or certificate were employed in a job related to the advanced occupational classes;

thirty-seven percent of the students had completed only intermediate level classes in an occupational program were found to employed in a job related to their occupational classes.

Only two percent of all former community college students who were contacted, regardless of the level of classes completed, were unemployed and seeking work.

Women and men were about equally successful in finding work which wasrelated to their college occupational classes; overall, 49% of the women and 45% of the men were found to be working in a job related to their occupational classes.

Reports to Colleges

The following reports, which detail the employment status of students for each program outlined in the college catalog have been submitted to colleges which participated in the study:

The Classroom Survey Report - The classroom survey report, which was submitted to the college teaching staff even before the students left college had two purposes:

1) to describe the universe of occupational students to be surveyed for the college staff;

2) and to review the data gathered in the classroom (names and addresses of enrolled students) in contacting students after they had left the college.

The results of the report inidcated that over 90% of the students responded to the classroom survey in a manner which would allow contact with the student when the student no longer attended.

The College Follow-Up Report - This report consists of a cross-tabulation of the student goal derived from the classroom survey with the job status of the former student and Vocational Education Data System employment data.

The Employer List - The second part of the student follow-up report consisted of a list of the employers of students with related jobs organized by TOP program category; all students were listed who gave either the name of their employer or their job title - the list contained the name and address of the student, the student's job title, and the name and address of the company employing the former student.

The Follow-Up Questionnaire - The third part of the report to colleges was the follow-up questionnaires, with the unedited comments of the former students.

The Aggregated Statistical Report - The fourth part of the report is an aggregation of the statistical data derived from all like programs to allow the college staff a broader view of employment trends in the occupational area in which they taught .

Summary and Conclusion

This field study has demonstrated that the quality of the data collected through the Vocational Education Data System for policy formation can be significantly enhanced by attending to college information needs and providing coordination among the colleges involved in follow-up activities.

Survey instruments and procedures which hold promise for improving both data quality and return rates were developed and tested. The data elements necessary for the transmittal of student follow-up data by magnetic tape were defined. It has been demonstrated that community colleges will voluntarily cooperate in a systematic evaluation of their programs by former students if the procedures hold promise for improving instruction, student placement, or student advisement.

USING STUDENT PERFORMANCE IN PLANNING

Background

The Federal Vocational Education Act of 1976 carried with it provisions for States to report information on the job status of former students of public vocational training programs. The National Center for Educational Statistics (NCES) was charged with the responsibility for developing a reporting system to fulfill this requirement of the Act. In 1978, the National Center for Educational Statistics' Vocational Education Data System (VEDS) was mandated as the reporting vehicle superseding existing state and local accountability procedures.

Prior to 1978, California Community Colleges relied upon the Student Accountability Manual (SAM) as a guide to identify and track students enrolled in occupational programs. The SAM Manual was first published in 1974 by the Community College Chancellor's Office. It was offered to colleges as a means of accounting for occupational students but was never required. When the Vocational Education Data System reporting requirements became known in 1978, the California Community College Chancellor's Office staff set about to revise the existing SAM Manual to comply with VEDS guidelines. The established procedures which had been used in identifying occupational students were retained but a new chapter was added to the SAM Manual which described data definitions and procedures which would be required to bring colleges into compliance with VEDS. Workshops were conducted throughout the state by the Chancellor's Office staff to assist colleges in making the transition to the VEDS reporting system. In spite of the effort of the Chancellor's Office staff, California Community Colleges have experienced great difficulty in adapting to the new reporting system.

In 1982, four years after the introduction of VEDS, very few community colleges were completing the required enrollment and follow-up reports on time; of greater concern, information which was reported was of questionable validity. The problem of collecting valid data from community colleges had become so acute that a special VEA project was authorized to determine what could be done to improve occupational program reporting procedures. That study, Student and Employer Follow-up, An Assessment of California Community Colleges' Ability to Comply with Vocational Education Data System Requirements (Brooks, 1982), detailed the difficulty encountered by colleges. To identify problem areas, twenty-six colleges were visited by a research team. Standardized interviews were conducted with all campus staff involved in producing the VEDS occupational student accounting and follow-up reports. The problems thus identified through campus interviews gave rise to specific recommendations for change in the way in which community colleges conduct occupational student follow-up. In the present study, we have attempted to field test the revised SAM procedures which are based upon the 1982 report.

Purpose of the Study

This study was undertaken to improve the quality of student follow-up data submitted by California Community Colleges in compliance with the Federal Vocational Education Data System report NCES 2404A-7. A second, and equally important purpose of the study was to develop and field test procedures for increasing the utility of VEDS data for local planning at each college.

Three objectives related to the gathering and reporting of vocational education statistics were outlined for this study; They were:

1. to conduct a cooperative student follow-up study of the former vocational education students from thirteen community colleges, standardizing data collection methods and definitions;
2. to assist community college vocational administrators in developing a plan for using the data derived from the study; and,
3. to provide technical assistance to colleges in meeting Vocational Education Data System (VEDS) Student Follow-Up Reporting requirements.

Assumptions

The following list describes the controlling assumptions which guided this project. All decisions relating to the procedures, research instruments, and report format and content were guided by these assumptions.

1) When information describing the job status of former Community College students is collected and aggregated to meet local community college information needs State and Federal (VEDS) information needs will also be met.

2) When information describing the job status of former community college students is collected for all occupational programs in a representative grouping of colleges, the information derived will have greater utility for colleges than information derived using present methods.

3) When employment information is collected from all occupational programs in a representative grouping of colleges the reduced administrative overhead and standardization of method and data definitions will make the derived information both more meaningful and less costly to produce than current data collection methods involving all colleges every year.

4) After the introduction of a successful model, the California Community College Chancellor's Office will be both able and willing to continue to provide funding and technical assistance to the Community Colleges to continue student follow-up activities.

5) The procedures and data definitions for vocational student accounting and follow-up activities should be standardized by the Office of the Chancellor in consultation with college staff; conversely, administrative action based upon the results of such studies should continue to be initiated by the colleges in consultation with the Office of the Community College Chancellor.

6) The results of a survey of former students will be acted upon by the college staff only when the staff has had a part in determining the information needed and how it will be used.

7) The results of a survey of former students will be more meaningful to the college staff if reported in locally derived (catalog) program categories rather than State or Federal instructional program categories.

8) Summary data from the results of a survey of former students will have credibility with the college staff only

if the college staff can identify the former students who were contacted and have the opportunity for further contact with former students and their employers.

9) California Community Colleges will voluntarily cooperate in a coordinated effort to study the job performance of former students if the study has the potential of providing better information for occupational program management, student advisement, and student placement.

Procedure

Selection of Colleges

In California, community colleges have been divided into four reporting groups for vocational education reporting purposes. The four groups were chosen by random selection. It has been demonstrated that the four reporting groups do not differ significantly in key geographic and demographic characteristics (Gold, 1978).

Thirteen colleges, one half of VEA Report Group III, were identified through a random selection procedure for inclusion in this study. One substitution was made from the original list of colleges. A fourteenth college was added to allow participation of a second college in a two campus district. A comparison of the fourteen colleges with the 105 community colleges within the state system on three geographic variables is shown in Figure I below:

Table I

Comparison of California Community Colleges
With the Follow-up Study Group on Geographic Variables

Location		Size			Community		
North	South	Large	Medium	Small	Urban	Rural	Suburb
48	57	28	30	47	31	29	45
8	6	4	6	4	6	4	4

The first row of Table I describes the classification of all California Community Colleges on the three geographic variables. The second row describes the classification of the community colleges under study on the same three variables.

A chi-square evaluation of the difference between the study group colleges and all California Community Colleges on the three geographic variables (chi-square, one sample test) demonstrated no significant difference between the study group and all colleges when considering any one of the three variables.

In comparison of "location" categories, chi-square = 0.74, df=1; in comparison of "size" categories chi-square = 1.84, df=2; in comparison of "community" categories chi-square = 1.51, df=2. (Appendix A describes the definitions and procedures used in this evaluation.)

With the substitution of a college from the original list, our selection of colleges cannot be regarded as truly random; any specific generalization from our sample employment data to statewide statistics for all California Community Colleges would be hazardous. We do, however, regard the aggregated employment data as useful information for the fourteen community colleges which participated in the study and the best trend information yet gathered for review by staff from other community colleges who administer or teach in like programs.

Occupational Program Definition

Occupational programs offered by the college were initially identified by a review of the college catalog. Any sequence of courses listed in the catalog which was described by the catalog as leading to employment without further education was identified as an occupational program. In addition, any sequence of courses which was described by the catalog as intended to improve the job skills of persons already employed was included in the list of occupational programs.

When the program list was complete, it was then reviewed by the occupational administrator for the college. Occupational programs which were not offered during the 1982-83 academic year were deleted from the list. Each program which remained on the list was then assigned a Taxonomy of Program (TOP) code. The TOP code, the catalog title for the program, and up to sixteen of the courses associated with the program were then entered into a computerized data file. Through this review of the college catalogs, a total of 472 occupational programs or program options were identified. One hundred and thirty-seven TOP Program Codes were needed to describe an unduplicated list of the programs and program options contained in college catalogs. A total of 121 programs and program options were needed to describe the programs and program options for which class enrollment and follow-up data were gathered.

Assignment of Program Codes - Taxonomy of Program codes were assigned in accord with the California Community Colleges Taxonomy of Programs, Fourth Edition, July 1983. The sixth digit of the TOP Code was used to differentiate program options offered by the college. Codes were initially assigned by the project staff without reference to the program codes previously assigned by college vocational administrators. Code assignments were then compared. Differences in code usually took two forms: 1) college staff were likely to assign a less specific code to a program than project staff (to allow greater local option in program content); 2) coding discrepancies also occurred when more than one code reference was a correct reference (Early Childhood Education may be coded as 130500 or 210720, Fashion Merchandising as 130320 or 050930, and Food Services as 130610 or 300200.

In cases where a more specific code or more than one code could be assigned, to insure compatibility of the data included in the report, it was agreed that project staff would assign the code to be used for reporting the program in this field study.

Occupational Course Identification

The published listing of classes for the Fall term, 1982 was obtained from each of the colleges and reviewed by the project staff. Classes associated with each of the occupational programs offered by the college were identified. A Student Accountability Manual (SAM) code was assigned by project staff to each of the classes and reviewed by the occupational program administrator. Where disagreements in coding occurred, codes were reviewed and modified with the program administrator making the final judgment. Occupational classes were then entered into a computerized course record containing the information necessary to identify the class (instructor, course number, and title), describe its function within the occupational curriculum (TOP and SAM codes), and locate the class (room number or off-campus site code). The process was repeated for the Spring Schedule of classes.

The SAM Manual, July 1981 Revision, was used as the guide in the assignment of Priority Codes. Since the primary purpose of the project was to develop procedures for vocational student follow-up, only those courses which would identify students for follow-up were coded. Courses which were judged to meet the SAM

"B", and "C" Priority were coded; courses judged to fit the "D" priority were not coded.

Priority "B" - Advanced Occupational

Courses which were described by the college catalog as taken in the advanced stages of the occupational program and served only one program. Usually no more than two courses were assigned a "B" code.

Priority "C" - Clearly Occupational

Courses which, according the catalog description, were beyond the beginning or exploratory level but did not meet the priority "B" definition were assigned a priority "C" code. Priority "C" courses, in some cases, served more than one program but were most closely associated with one. An additional restriction was placed upon "C" level courses. A "C" level course, or one of its prerequisites, had to provide the student with entry level job skills. Any course which, according to its catalog description, neither developed entry level job skills nor had prerequisite courses which did was not given a "C" Priority code regardless of the curriculum sequence.

Classroom Survey Procedures

A classroom survey of all students enrolled either intermediate (SAM Priority "C") or advanced (SAM Priority "B") classes offered by the colleges was conducted after the first census (the required student enrollment count, usually the fourth week of instruction) of the Fall term and again at the same time period during the Spring term. During the Classroom survey, a trained worker came into the classroom and distributed a questionnaire to all students who were present.

The Classroom Survey of occupational students was intended to accomplish four objectives:

1) to obtain an address where the student might be reached after leaving the college;

2) to alert the student to the follow-up activities which would take place;

3) to obtain student data which has proven to be difficult to obtain using other methods (sex and ethnic data);

4) and to determine the student's employment status while attending college.

Using students or temporary staff with two hours of training and a planned visitation schedule, the average time required in the classroom to complete the survey was seven minutes. Most of the surveyors were able to average three classroom visitations per hour during daylight hours or two visitations during evening hours. Classroom Surveys were conducted during both the Fall and Spring term in all but two of the colleges. (A review of the questionnaire items and a copy of the Classroom Questionnaire may be found in Appendix B.)

The data derived from the classroom survey were entered into a computerized data file. A separate entry was made for each returned questionnaire. When the data file was complete, it was then sorted by student name and identification number. The SAM procedure for associating the student with one occupational program was applied to the student data file.

In the SAM system, the student is assigned to an occupational program based upon the course in the student's study list with the highest "priority code"; when two courses have the same code, the student is assigned to the occupational program of the first encountered code. (See the SAM Operations Manual, Chapter two for a more complete explanation of the SAM assignment procedures.) Using the SAM model, an occupational student data file was created for each participating college for both the Fall and Spring term. At the conclusion of the Spring term, the two data files were merged. Student records for the Fall and Spring term were compared. When a student record was found for the same student both Fall and Spring, the Spring address was kept and the student was assigned to the occupational program with the highest SAM priority code. When SAM priority codes were equal, the student was assigned the more recent Spring SAM priority code.

At the beginning of the the Fall 1983 term, college provided a data tape of the name and student number of all students who were enrolled for the Fall, 1983 term at the college. Students whose name and number were not found on the Fall, 1983 data tape were designated for follow-up in the Employment Survey.

Employment Survey Procedures

Two purposes were outlined for the Employment Survey at the outset of this study; they were:

1) to determine the employment status of former community college students;

2) and to seek the student's evaluation of the skills and knowledge gained through the instructional program.

Student Follow-up Questionnaire Development

Questionnaire Revision - The National Center for Educational Statistics questionnaire mandated for use in the follow-up of occupational students was a source of concern for administrators participating in the project. The consensus of opinion among participating administrators was that the questionnaire needed revision to be effective in gathering basic employment information. The first task under taken by project staff in the employment survey was the revision of the questionnaire.

The NCES form is composed of six questions which relate to the employment of the former student. The questions were retained in the revision but restated for clarity. The revised questions were printed on one side of an 8 1/2 x 11 inch form. On the back side of the revised form, questions were added which were intended to be useful in the evaluation of the content of the specific occupational program.

Student Follow-up Workshops - A series of workshops were scheduled for the teaching and administrative staff at participating colleges. The workshops had two purposes:

1) to enlist the support of the college staff for this field study;

2) and to seek the assistance of the college staff in determining form and content of the follow-up questions.

Workshops were held at twelve of the fourteen participating colleges. Line administrators of occupational programs at the division or department level participated in most of the workshops. The participation of the teaching staff was left to the judgment of the college administrator and varied from college to college. At the workshops, staff opinion on follow-up questionnaire items was encouraged. Examples of follow-up questionnaire items were discussed. The primary means of involving the teaching staff was participation in the development of a list of the "Skills and Knowledge" their occupational program intended to teach.

After the series of workshops, "Skills and Knowledge" lists suggested by college staff at different colleges were combined to form a single list for all occupational programs bearing the same TOP Code. Similar items were then combined and all lists were limited to sixteen items. When a list was not developed through the workshop activity for an occupational program offered by one of the colleges, a tentative sixteen item "Skills and Knowledge" list was constructed by project staff from course descriptions in the catalog. After lists were developed for each TOP Program category to be included in the survey, they were resubmitted to the colleges staff at each of the participating colleges for revision and review. The titles of the instructional programs and program options for which "Skills and Knowledge" lists have been developed is reported in Appendix "B". After lists were completed for each TOP Program and Program Option, a data file was constructed which allowed the appropriate list to be incorporated into the follow-up questionnaire from a computerized data file at the time the questionnaire was printed. The "Skills and Knowledge" lists were used as a primary program evaluation device in the follow-up questionnaire. (See Appendix "C" for a description of the revised student follow-up questionnaire.)

The Employment Survey

The Employment Survey of former students was begun in June, 1983. All students who had attended one or more of the SAM "B" or "C" occupational classes surveyed during the Fall term, 1982 and did not return for the Spring, 1983 term were mailed the Employment Survey form in June, 1984. Students who completed the Spring term during the 1982-83 academic year and did not return for the Fall 1983 were mailed the Employment Survey Form in April, 1984. Students who did not return the mailed survey form were contacted by telephone. Telephone interview procedures required three attempts to contact the student before abandoning the effort.

The occupational student record was updated with the Employment Survey information. A separate occupational student data file was maintained for each of the participating colleges. When the data files were completed, the VEDS data elements were abstracted from each file and used to construct an aggregated data file sorted by Taxonomy Of Program Code.

Results

The primary purpose of this study was to field test procedures which could be recommended to California Community Colleges for use in conducting occupational student follow-up studies; we have limited our presentation of results to that purpose. We do not consider the data gathered in course of this study to be sufficiently representative of California Community Colleges to be used to estimate state-wide employment trends in specific occupational areas; we therefore caution against the use of the data for that purpose.

In this section of the report we have presented summary data which describe the scope of the study or evaluate the study's methodology. Appendices C, D, and E contain aggregated data which provide a comprehensive overview of the employment status of students who completed occupational programs or classes in fourteen California Community Colleges. We believe that the definitions and procedures which guided the collection of this information, when used to collect student follow-up information in a representative grouping of colleges, will provide reliable state-wide employment trend information.

Table II, on the following page, records the total unduplicatged number of students included in the study at each of the participating colleges. The table reports the number of students completing the classroom survey questionnaire; the number of students who were mailed an employment survey questionnaire, and the number of students reporting employment data.

Table II

The Occupational Follow-up Study Group: Totals for Participating Colleges

College	In Class	Mailed	Returned
American River College	5208	2309	1615
Butte College	1393	1230	625
Cerritos College	6680	3164	2106
Citrus College	3024	1747	1040
Contra Costa College	2071	1317	790
College of the Siskiyous	318	236	152
East Los Angeles College	1599	817	594
Evergreen Valley College	1643	919	726
Merced College	1305	857	632
Rio Hondo College	2921	1770	1205
San Diego Miramar College	761	378	223
San Jose City College	3032	1755	1239
Santa Rosa College	3720	3072	1887
West Los Angles College	1731	974	586
Total Students	34640	20545	13240

Fifty-nine percent of the students who originally completed questionnaires in the classroom were identified for follow-up. Sixty-four percent of those students who were identified for follow-up returned information about their current employment. (The number in the "Returned" column includes students who were already employed in a related job while attending college.)

Table III summarizes the aggregated employment data for students classified as "Completers" and "Leavers" from participating colleges.

Table III

Vocational Education Data System (VEDS) Categories
And Summary Employment Statistics

Employment Category		Employed			Unemployed	
	Military Service	Job is Related	Job Not Related	Attends College	Seeking Work	Not Seeking
Completers with Award	3 0%	2458 60%	1123 27%	276 7%	151 4%	73 2%
Completers no Award	50 1%	1611 45%	1185 33%	367 10%	174 5%	170 5%
Leavers	105 2%	2153 37%	2348 41%	679 12%	269 5%	227 4%
Totals	158 1%	6222 46%	4656 35%	1322 10%	594 4%	470 4%

A significantly greater percentage of those students classified as "Completers" (students who either complete an advanced class area or receive a degree or certificate in an occupational program) worked at a related job than those who were classified as "Leavers" (students who neither completed an advanced class nor received an academic award.)

Response Bias

Two questions from the follow-up questionnaire were used as "check questions" to determine the likelihood of response bias in returned questionnaires. The first of these questions was the response to the question designating sex.

The sex designation of students who were mailed questionnaires was compared with that of the students who returned them; table IV below describes this comparison.

Table IV

Sex Designation as a Percentage of Total
And Responding Students

	Responding	Total
Men	6614 (47.8%)	10039 (48.9%)
Women	6192 (44.7%)	8848 (43.0%)
Sex Unknown ..	1042 (07.5%)	1658 (08.1%)

Sex designation of those students who provided employment information (Responding Group) does not differ significantly, more than two percent, from all students within the study group in any category.

Table V below compares the purpose for attending college of all student in the study group with those students who returned the questionnaire.

Table V

Student's Purpose In Attending College	Returned Questionnaire		All Students	
New Career	5471	(41%)	8341	(41%)
Job Advancement	2552	(19%)	3414	(17%)
Improve Job Skills	1710	(13%)	2285	(11%)
Maintain License	454	(3%)	693	(3%)
Improve Non-Job Skills	615	(5%)	933	(5%)
Prepare for Transfer	1650	(12%)	2689	(13%)
None of the Above	970	(7%)	2190	(11%)
	13422		20545	

The purpose for attending of those students who responded to the employment questionnaire does not differ significantly (more than two percent) from all students within the study group in any meaningful category (the first six).

Reports to Colleges

Four reports based upon the data derived from this study have been made available to participating colleges:

The Classroom Survey Report - This report describes the universe of occupational students enrolled in occupational programs. It has two purposes:

The report's primary intent was to determine the usefulness of the classroom survey information in contacting the student when the student was no longer enrolled (information such as the number of students reporting a complete address, their full name, and telephone number).

The second purpose of the Classroom Survey Report was to describe characteristics of occupational students essential to program management (information such as the number of students enrolled in each occupational program, their educational goals, their employment status, their sex and ethnicity). A separate report was provided for each of the occupational programs offered by the college. A summary report for all programs was also provided. The Classroom Survey report was completed for both the Fall and Spring terms of the 1982-83 academic year.

The Employment Survey Report - This report consists of a cross-tabulation of student goal (derived from the classroom survey), with the job status of the former student. The report **was made** for each occupational program offered by the college in **a Modified** VEDS format.

The Employer List - This report lists former students who work in jobs related to their occupational training program. The list is categorized TOP program category; all students are listed with their job title and their employer's name, address, and telephone number.

The Follow-Up Questionnaire - The third part of the follow-up report to colleges consists of the Follow-up Questionnaires which were returned by the former students. Questionnaires were organized by occupational program and alphabetized. Since this part of the report was considered to be the most useful to the college teaching staff, it was recommended that questionnaires be made available to the teaching staff for review.

The Aggregated Employment Status Report - The fourth part of the report is an aggregation of the employment data derived from all like programs offered by the participating colleges. The report is intended to offer the colleges comparative employment data. The report is duplicated in Appendices C, D, and E.

Return Rates

Colleges participating in the study have experienced a Classroom Survey Questionnaire return rate of 93% or greater of usable data. Participating colleges have experienced Follow-up Questionnaire return rates of 52% or greater and with the inclusion of student follow-up data derived from students already working at a related job while attending classes, a return rate of 65%.

Recommendations

Conversion To TOP from USOE Taxonomy

The colleges participating in this study were the first to report Vocational Student Data System (VEDS) information using Taxonomy of Program codes as the reporting categories. Colleges reported little difficulty in making the conversion from USOE to TOP to Codes. The procedure used in the study, an independent review by the project staff, insured a review of all program coding. Several items regarding the coding conversion deserve mention:

Many of the colleges offer programs which do not correspond to the approved program listing maintained by the California Community College Chancellor's Office. Since most programs were first approved under the more generalized USOE coding system, a shift in program categories and an increase in the number of programs reported by colleges should be expected with the change in taxonomy.

Some redundancy (and therefore confusion) still exists in the Taxonomy of Program coding structure. The codes which caused difficulty in program identification were the program options for 1306.00, Foods and Nutrition; when considered as an alternative to the program options for 3002.00, Food Service Technonogy. The coding options of 1302.20, Clothing Merchandising; appears to be a duplication of 0509.00, Apparel and Accessories and continues to cause confusion. No clear difference exists between 0201.10, Architectural Technology; and the alternative code listed as 0953.10, Drafting Technology - Architectural.

Even with its remaining problems, in the opinion of the project staff, the revised Taxonomy of Program manual has greatly improved California Community Colleges' ability to accurately report information related to their occupational programs. With the 1983 revision, Most of the redundancies in TOP codes have been eliminated. By allowing the sixth digit of the code to be used as an unreported local program option, program differences which are important to distinguish locally can be maintained by the college without resorting to another program coding system. When TOP codes were independently assigned by the project staff, in most instances, there was close agreement with the codes assigned by college administrators. Disagreements in the assigned codes were usually related to the level of specificity which would be used in describing a program rather than the appropriateness of the code.

Use of SAM Priority Code as a Program Identifier

Although the SAM Operations Manual has been available to the California Community Colleges since 1974 as a guide in conducting occupational student follow-up studies, to our knowledge, this is the first time that there has has been a systematic, coordinated, attempt to implement SAM follow-up procedures by a significant number of colleges. With an independent review of all SAM codes assigned by college staff, an opportunity existed to standardize SAM codes among colleges to a degree that has not been possible previously. We believe the follow-up process and the resulting occupational program data was greatly improved by the effects of this standardization.

Student Goal and Follow-up Strategy

The open enrollment classes offered by community colleges attract students with a wide variety of purposes for attending. A fact well documented by Sheldon and Hunter (1981). Our data suggests that students in intermediate or advanced occupational classes may be more alike in their purposes for attending; 89% of the students who attended intermediate or advanced occupational classes chose a goal statements which related to an occupational purpose for atteding classes.

Our data suggests that student who declare an inservice training goal (by choosing the second, third or fourth goal statement) account for 31% of the students. During the classroom survey, two questions are ask which could have bearing on the follow-up strategy used with students enrolled who have a job related to their occupational classes.

> "Do you currently hold a job related to college classes?"; and,
>
> "Do you plan to keep the job you now hold after you leave the college?"

In our view, any student enrolled for inservice training reasons who answeres both of the questions "Yes" should be asked to complete a follow-up questionnaire during the final meeting days of the class. In our opinion, this approach would reduce the cost of conducting the employment survey without any loss of useful employment information.

In addition to beginning follow-up in the classroom, it it is our opinion that little would be lost if students who choose the fifth and seventh "Purpose for Attending" categories were not contacted at all or, if contacted, asked other than employment questions. We make this suggestion for several reasons.

Students with other than occupational objectives do not meet the NCES definition of a "Vocational Student". There is Federal mandate to make further contact with students who did not have an occupational objective for attending college. In our sample, only 29% of the students who reported other than an occupational purpose for attending were employed in a job related to the occupational program in which they were enrolled.

In our opinion, the practice of including students in an employment survey who attend classes for reasons other than the development of employment skills can present a negative picture of the effectiveness of the occupational program while providing very little information for program improvement.

Conclusion

In this field test of SAM, the Student Accountability Model, survey instruments and procedures which hold promise for improving both data quality and return rates in occupational student follow-up studies in California Community Colleges were tested. This study has demonstrated that the quality of data collected through the Vocational Education Data System for policy formation can be significantly enhanced by following the procedures which are outlined in the SAM Operations Manual, attending to college information needs, and providing coordination among the community colleges involved in follow-up activities.

BIBLIOGRAPHY

Abrams, Charles; and Harris, William. Project Trace: II Field Test and Evaluation of a System to Follow-up High School Graduates Using Sampling Techniques: Goleta, California: Humam Factors Research Incorporated, 1974.

Brooks, Walter; and Arce, Eve-Marie. Student and Employer Follow-Up An Assessment of California Community College's Ability to Comply With Vocational Education Data System Requirements: Sacramento, California: Arce-Brooks, Consultants in Institutional Research, 1982.

California Community College's Data Element Dictionary: Sacramento, California: California Community Colleges, Office of the Chancellor, 1981.

Gold, Ben K.; and Morris, William. Student Accountability Model (SAM) : Operations Manual. Sacramento: California Community Colleges, Office of the Chancelor, 1981.

McGillicuddy, Shirley B.; and Morris, William. Project SAM: Employer Follow-Up : San Jose, California: San Jose City College, 1976.

Sheldon, M. Stephen; and Hunter, Russell. Statewide Longitudinal Study: Final Report 1978-81. Woodland Hills, California: Los Angeles Pierce College, Office of Institutional Research, 1980.

APPENDICES

Master List

Vocational Skills List   Revised: 10/15/84   Page: 1

	TOP	Program Title
1.	010210	Animal Science
2.	010240	Plant Science
3.	010242	Viticulture
4.	010245	Fruit & Nut Production
5.	010900	Ornamental Horticulture
6.	010912	Horticulture - Nursery Management
7.	010916	Horticulture - Landscape Design
8.	011210	Agribusiness
9.	011270	Animal Grooming & Training
10.	011280	Food Processing Technology
11.	011400	Forestry
12.	011420	Forest Protection
13.	011520	Natural Resources Recreation
14.	011610	Mechanized Agriculture
15.	020300	Interior Design
16.	050200	Accounting
17.	050400	Banking & Finance
18.	050440	Cashiering / Bank Tellering
19.	050600	Business Management
20.	050610	Small Business Management
21.	050630	Management/Supervision
22.	050635	Management/Supervision
23.	050910	Advertising
24.	050970	Marketing

	TOP	Program Title
25.	050975	Distribution & Logistics
26.	051100	Real Estate
27.	051200	Insurance
28.	051410	Secretarial Studies - Legal
29.	051420	Secretarial Studies - Medical
30.	051430	Court Reporting
31.	051440	Administrative Secretary
32.	051450	Office Clerk
33.	051455	Office Machines
34.	051470	Word Processing
35.	060200	Journalism
36.	060300	Television Journalism
37.	070100	Computer & Information Science
38.	070300	Data Processing - Computer Operator
39.	070410	Data Processing Programmer - (Bus)
40.	070510	Data Processing Analyst
41.	080820	Sign Language Studies
42.	092510	Civil Engineering Tech
43.	092511	Surveying
44.	093400	Electronics
45.	093409	Electronics Assembler
46.	093410	Electronic Technology - Microwave
47.	093420	Industrial Electronics
48.	093430	Electronics - Television Service

	TOP	Program Title
49.	093450	Electric Power Distribution
50.	093460	Computer Electroncis
51.	093465	Computer Electroncis
52.	093480	Laser Technology
53.	093510	Appliance Repair
54.	093515	Electronics - Camera Repair
55.	094510	Air Conditioning & Refrigeration
56.	094550	Solar Technology
57.	094710	Diesel Mechanics
58.	094715	Diesel Mechanics - Agriculture
59.	094810	Automotive Mechanics
60.	094811	Auto Mechanics - Imported Autos
61.	094820	Auto Body & Fender
62.	094821	Body Repair Estimating
63.	094830	Small Engine Repair
64.	094831	Motorcycle Repair
65.	095000	Aircraft Maintenance
66.	095010	Aircraft Mechanics - Airframe
67.	095011	Aircraft Production
68.	095020	Aircraft Mechanics - Powerplant
69.	095040	Aircraft Electronics
70.	095200	Construction - General Building
71.	095210	Construction - Carpentry
72.	095250	Mill & Cabinet Technology

	TOP	Program Title
73.	095300	Drafting Technology
74.	095310	Architectural Technology
75.	095351	Design Drafting - Pressure Piping
76.	095420	Plastic Technology
77.	095604	Manufacturing Technology
78.	095610	Metallurgical Technology
79.	095611	Chrome Plating & Metal Finishing
80.	095620	Structural Steel Fabrication
81.	095621	Ironwork Technology
82.	095630	Machine Tool Technology
83.	095637	Machine Tool - Numerical Control
84.	095650	Welding & Cutting
85.	095680	Industrial Quality Control
86.	095681	Nondestructive Testing
87.	095700	Construction Technology
88.	095710	Construction Management
89.	095720	Construction Technology
90.	095810	Water & Waste Water Treatment
91.	100920	Commercial Arts
92.	101100	Photography
93.	103000	Graphic Arts
94.	120310	Nursing - Registered Nurse
95.	120320	Licensed Vocational Nurse
96.	120330	Nurses Aide

	TOP	Program Title
97.	120335	Nurses Aide - Central Supply
98.	120370	Medical Assisting
99.	120410	Dental Assisting
100.	120420	Dental Hygiene
101.	120430	Dental Laboratory Technician
102.	120520	Medical Equipment Technology
103.	120521	Medical Equipment Tech - Microscopy
104.	120730	Respiratory Therapy
105.	120751	Prosthetics and Orthotics
106.	120910	Optical Technology
107.	121110	Pharmacy Technican
108.	121220	Physical Therapy Assistant
109.	121510	Medical Records Technology - Cancer Mgmt
110.	122500	Radiological Technology
111.	123900	Psychiatric Technician
112.	125010	Paramedical Technician
113.	125020	Emergency Medical Tech - Ambulance
114.	130300	Clothing & Textiles
115.	130310	Clothing & Design
116.	130320	Fashion Merchandising
117.	130620	Dietetics
118.	140110	Legal Assisting
119.	160110	Library Technology
120.	210500	Administration of Justice

	TOP	Program Title
121.	210510	Administration of Justice - Corrections
122.	210530	Industrial Security
123.	210550	Administration of Justice - Academy
124.	210700	Human Services
125.	210720	Early Childhood Education
126.	210730	Early Childhood Education - Home Care
127.	210750	Instructional Aide - Classroom
128.	210751	Instructional Aide - Bilingual
129.	210754	Instructional Aide - Special Ed
130.	210760	Recreation Assistant
131.	213300	Fire Control Technology
132.	300200	Food Services
133.	300205	Food Services - School
134.	300210	Food Services - Chef Training
135.	300211	Food Services - Baking
136.	300250	Food Services - Restaurant Mgmt
137.	300400	Administrative Housekeeping
138.	300700	Cosmetology
139.	300910	Flight Attendant
140.	300930	Travel Agency Operations

PROCEDURE 1

Subject: Identification of participating colleges.

Action by	Action
Chancellor's Office	1. Send a letter to all occupational deans of the colleges in VEA Report Group IV inviting participation in the project.
College Occ Ed Dean	2. Indicate tentative participation by mail or telephone.
Project Director	3. Mail a letter to the occupational dean outlining the project. Follow with a telephone call for clarification.
College Oc Ed Dean	4. Seek the formal approval of the College for participation in the project.

PROCEDURE 2

Subject: Development of the Course Semester File.

Action by	Action
Project Director	1. Request a college catalog and a fall and spring schedule of classes from each participating college.
	2. Review the college catalog and identify all occupational programs assigning a tentative TOP code at the five digit level to each.
College Oc Ed Dean	3. Review the TOP codes assigned by the project director; discuss any disagreement in the codes assigned.
Project Director	4. Mark all the courses in the college Schedule of Classes associated with each TOP Program.
Research Consultant	6. Assign "B" and "C" SAM Priority codes to all appropriate classes.
College Oc Ed Dean	7. Review the SAM codes assigned by the project director; discuss any disagreement in the codes assigned and make any desired changes.
Data Entry Operator	8. Enter the coded courses into the Course Data File to be used in the Classroom Survey.

PROCEDURE 3

Subject: Classroom Survey.

Action by	Action
Project Director	1. Prepare a Classroom Survey Schedule identifying the college, the week of the Classroom Survey, and all Occ Ed classes which will be visited.
College Oc Ed Dean	2. Identify a person on campus who will act as campus coordinator for this activity.
College Placement Office	3. Advertise for students to conduct the classroom survey.
Area Coordinator	4. Train both the students and the college survey coordinator in Classroom Survey Procedures.
Classroom Surveyors	5. Conduct the classroom visitations in accord with the TASK OUTLINE for that activity.
College Coordinator	6. Receive Survey envelopes and place in course number order.
	7. Identify classes which were missed from the classroom visit schedule and assign one surveyor to conduct make-up visits.
	8. Verify the student's hours and sign the student time card.
Area Coordinator	9. If the college has chosen centralized data entry, foreward the classroom questionnaires to Sacramento for data entry. If the college has chosen local data entry, take the questionnaires to the DP department.
Data Entry Operator	10. Enter the classroom data initializing the Occupational Student Record.

PROCEDURE 4

Subject: Development of the Occupational Program file.

Action by	Action
Project Director	1. Request a college catalog and a fall and spring schedule of classes from each participating college.
	2. Review the college catalog and identify all occupational programs assigning a tentative TOP code at the five digit level to each.
College Oc Ed Dean	3. Review the TOP codes assigned by the project director; discuss any disagreement in the codes assigned.
Project Director	4. Furnish the college Oc Ed Dean with the following items: a. a Follow-up Questionnaire with as sample "Skills and Knowlege" list for each occupational program; b. a blank Supplemental Follow-up Form for each occupational program.
Occ Ed Dean	5. Distribute Follow-up Questionnaires to the college instructional staff for review.
College Instructional staff member	6. Review the "Skills and Knowledge" list adding desired items and modifying listed items.
	7. If additional items are desired, add items to the Supplemental Follow-up Questionnaire.

Data Entry Operator	8. Enter the revised "Skills and Knowledge" lists into the appropriate Occupational Program Record.
	9. Enter the occupational courses associated with the program in the college catalog into the Occupational Program Record.
	10. Enter the Supplemental Questionnaire into the Occupational Program Record
	11. Print a revised student follow-up questionnaire for each occupational program.

OCCUPATIONAL STUDENT RECORD

Data Element Specifications Page 01

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Student Identifier	SR01	1-10	X(10)RJ	Locally Assigned Code Zero fill to common code length, then blank filled
Student First Name & Initial	SR02	11-25	X(15)LJ	
Student Last Name	SR03	26-40	X(15)LJ	
Student Street Address	SR04	41-60	X(20)LJ	
Student City Address	SR05	61-75	X(15)LJ	
Student Zip Code	SR06	76-80	9(5)	
Student Telephone Number	SR07	81-90	9(10)	
Sex	SR08	91	9	Code Category 1 Male 2 Female 3 Unknown
Racial and Ethnic Code	SR09	92	9	Code Category 1 American Indian 2 Asian 3 Black 4 Filipino 5 Hispanic 6 White 7 Pacific Islander 8 Other

OCCUPATIONAL STUDENT RECORD

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Academic Award	SR10	93	9	Code Category 1 Degree 2 Certificate 3 Neither Derived from the Classroom Survey; updated from the graduation list of awards.
TOP Program Code	SR11	94-99	9(6)	Refer to Chancellor's Office Publication _Taxonomy of Programs_, July 1983 Derived from the Classroom Survey; updated from the graduation list of awards.
SAM Code	SR12	100	X	Code Category A Apprenticeship B Advanced Occupational C Clearly Occupational D Possibly Occupational E Non-Occupational
Program/Course Identifier	SR13	101-106	X(6)	Course Section Identifier with the highest and most recent SAM Code; compared with the previous term at the end of each term.

OCCUPATIONAL STUDENT RECORD

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Student Goal	SR14	107	9	Code Category 1 New career 2 Job advancement 3 Improve job skills 4 Maintain license 5 Improve non-job skill 6 College transfer 7 Purpose not listed Employment data elements are derived from the classroom survey and updated by the Employment Survey.
Employment Status	SR15	108	9	Code Category 1 Working full time 2 Working part time 3 Seeking work 4 Not seeking work
Job Relationship	SR16	109	9	Code Category 1 Job is related to listed classes. 2 Job is not related to listed classes. 3 Job is related to other classes.
Job Title	SR17	110-129	X(20)	

OCCUPATIONAL STUDENT RECORD

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Employer Name	SR18	130-159	X(30)LJ	(Employment data is first obtained during the Classroom Survey; it is updated with the Employment Survey data.)
Employer Street Address	SR19	160-179	X(20)LJ	
Employer City Address	SR20	180-194	X(15)LJ	
Employer Zip Code	SR21	195-199	9(5)	
Employer Telephone Number	SR22	200-209	9(10)	
Job Placement	SR23	210	9	Code Category 1 Instructor 2 Placement Office 3 Work Experience 4 Other 5 No Help
Pay Period	SR24	211	9	Code Category 1 Per Hour 2 Per week 3 Per month
Pay Amount	SR25	212-217	9999‸99	Hourly Pay Rate will be derived by deviding the appropriate Pay Period. (Where a week=40 hours and a month=160 hours)
Weekly Work Hours	SR26	218-219	99	(If the reported Weekly Work Hours <> 40 then the reported hours are used to derive Hourly Pay Rate.)

OCCUPATIONAL STUDENT RECORD

Data Element Specifications

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Completed Classes	SR27	220-235	9(16)	A sixteen digit data element; each digit is either "0" or "1". Code Category 0 The course was not completed. 1 The course was completed.
Reason Job Is Unrelated	SR28	236-239	9(4)	Code Category 0 Student's job is related to college classes. 1 Student has an unrelated job which he/she will keep. 2 Skills student has acquired are judged to be inadequate for employment purposes. 3 Student looked but could not find a job related to classes. 4 Other reason

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Academically Disadvantaged (Same as USRS "V3")	SR29	240	9	Code Category 1 Not Disadvantaged 2 Mainstream; no support 3 Mainstream; with support 4 Separate program
Economically Disadvantaged (Same as USRS "V4")	SR30	241	9	Code Category 1 Not disadvantaged 2 Mainstream; no support 3 Mainstream; with support 4 Separate Program
Handicapped (Same as USRS "V5")	SR31	242	9	Code Category 1 Not Handicapped 2 Mainstream; no support 3 Mainstream; with support 4 Separate Program
Limited English Speaking (Same as USRS "V6")	SR32	243	9	Code Category 1 Not Limited English 2 Mainstream; no support 3 Mainstream; with support 4 Separate Program

OCCUPATIONAL STUDENT FOLLOW-UP TRANSMITTAL RECORD

Data Element Specifications Page 01

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
College Code	FL01	1-6	9(6)	California District and School Code with the format CCTSSS where: CC = County Code T = Type Institution SSS = Three digit sequence number
Student Follow-up Report Year	FL02	7-9	9(3)	The format is YY where: YY = Last two digits of the calendar year
Student Identifier	FL03	10-19	X(10)RJ	Locally Assigned Code Zero fill to common code length, then blank filled
Sex	FL04	20	9	Code Category 1 Male 2 Female 3 Unknown
Racial and Ethnic Code	FL05	21	9	Code Category 1 American Indian 2 Asian/Pacific Island 3 Black 4 Filipino 5 Hispanic 6 White 7 Other

OCCUPATIONAL STUDENT FOLLOW-UP TRANSMITTAL RECORD

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Academic Award	FL06	22	9	Code Category ---- -------- 1 Degree 2 Certificate 3 Neither
TOP Program Code	FL07	23-28	9(6)	Refer to Chancellor's Office Publication Taxonomy of Programs, July 1983 Derived from the Classroom Survey; updated from the graduation list of awards.
SAM Code	FL08	29	X	Code Category ---- -------- A Apprenticeship B Advanced Occupational C Clearly Occupational D Possibly Occupational E Non-Occupational
Student Goal	FL09	30	9	Code Category ---- -------- 1 New career 2 Job advancement 3 Improve job skills 4 Maintain license 5 Improve non-job skill 6 College transfer 7 Purpose not listed

OCCUPATIONAL STUDENT FOLLOW-UP TRANSMITTAL RECORD

Data Element Specifications

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References
Employment Status	FL10	31	9	Code Category 1 Working full time 2 Working part time 3 Seeking work 4 Not seeking work
Job Relationship	FL11	32	9	Code Category 1 Job is related to evaluated program. 2 Job is not related to evaluated program. 3 Job is related to another program.
Job Title	FL12	33-52	X(20)	
Employer Zip Code	FL13	53-57	9(5)	
Job Placement	FL14	58	9	Code Category 1 Instructor 2 Placement Office 3 Work Experience 4 Other 5 No Help
Pay Amount	FL15	59-64	9999^99	Hourly Pay Rate

OCCUPATIONAL STUDENT FOLLOW-UP TRANSMITTAL RECORD

Data Element Specifications

Data Element Title	Element Number	Record Location	Cobol Picture	Codes, Defaults, and References: Code	Category
Academically Disadvantaged (Same as USRS "V3")	FL16	65	9	1	Not Disadvantaged
				2	Mainstream; no support
				3	Mainstream; with support
				4	Separate program
Economically Disadvantaged (Same as USRS "V4")	FL17	66	9	1	Not disadvantaged
				2	Mainstream; no support
				3	Mainstream; with support
				4	Separate Program
Handicapped (Same as USRS "V5")	FL18	67	9	1	Not Handicapped
				2	Mainstream; no support
				3	Mainstream; with support
				4	Separate Program
Limited English Speaking (Same as USRS "V6")	FL19	68	9	1	Not Limited English
				2	Mainstream; no support
				3	Mainstream; with support
				4	Separate Program

SAN JOSE CITY COLLEGE

During the 1982-83 academic year, the employee named above was enrolled in an instructional program which is now being evaluated. We have asked our former student, your employee, to seek your help.

The purpose of this evaluation is to improve instruction. We would appreciate your contribution.

Please complete this questionnaire and return it to the college in the envelope provided.

First, what is your name and job title?

Supervisor's Name ____

Job Title ____

Many of the essential occupational skills and knowledge taught through the college program are listed **below**. The list is admittedly general; we invite you to help us make it more specific.

Please check [✓] the column which describes the importance of the skill or knowledge to the job held by our former student. Please add any skills to the list which the job requires.

Occupational Skills and Knowledge	A Not required for the job	B Required to get the job	C Can be learned on the job

Please respond to the items on the back of this form.

(Please confer with our former student in answering the next question if you choose to do so.)

In what ways has the college **best** prepared this student for the present job?

In what ways has the college ***least*** prepared the student for the present job?

To your knowledge, was the decision to hire or promote this employee to the present position based in part on skills developed through the college instructional program? **Yes**_____ **No**_____

Please explain

Job Description

If your organization maintains formal job descriptions, would you share with us a copy of the description of the job held by our former student and any closely related jobs?

If you do not maintain formal job descriptions, would you please complete the outline below?

Job Title

Principal Duties

Required Skills and Knowledge

Education or Training Requirements

Normal Working Hours

Wage Range ***(please choose*** *one)*:

From $_____ **per hour to** $_____ per hour
From $_____ **per** week to $_____ per week
From $_____ per month to $_____ per month

Thank you for taking the time to complete this questionnaire.

999999999 FIRST & LAST NAME

093480 LASER TECHNOLOGY

Please check [✓] the bracket to the left of the title of each of the college classes which you have completed.

1[ ] ELEC 120A ELECTRONICS MATH
2[ ] ELEC 120B ELECTRONICS MATH
3[ ] LASER 100 INTRO LASER TECH
4[ ] LASER 101 LASER OPTICS
5[ ] LASER 102 LASER TECHNOLOGY
6[ ] LASER 105A LASER COMPUTER
7[ ] LASER 105B LASER ELECTRONICS
8[ ] LASER 111 LASER MEASUREMENTS
9[ ] LASER 112 VACUUM TECHNIQUES
10[ ] MACH 101 INTRO MACHINE TECH
11[ ] PHYSICS 20 TECHNICAL PHYSICS

Is your present job related to the occupational skills taught in the classes you checked?

1 ☐ Yes
2 ☐ No
3 ☐ Related to other classes (Please list.)

Many of the essential occupational skills and knowledge you may have learned through the classes you checked are listed below.

Please check [✓] the column which describes the importance of the skill or knowledge to your job. You may wish to check more than one column; check only those skills and knowledge you were taught.

	A	B	C	D
Occupational Skills and Knowledge	Helped to get the job?	Helped to do the job?	Helped to advance on the job?	Not helpful in your job?
1 KNOWLEDGE OF AC/DC THEORY				
2 KNOWLEDGE OF GEOMETRIC OPTICS				
3 KNOWLEDGE OF ION GAS LASERS				
4 KNOWLEDGE OF OPTIC TRANSMISSION				
5 KNOWLEDGE OF ORGANIC DYE LASERS				
6 KNOWLEDGE OF PULSE LASER FLASHLAMPS				
7 KNOWLEDGE OF Q-SWITCHING METHODS				
8 KNOWLEDGE OF SEMI-CONDUCTOR LASERS				
9 SKILL IN FAULT ISOLATION METHODS				
10 SKILL IN GAS MEASUREMENT METHODS				
11 SKILL IN LASER CIRCUIT ANALYSIS				
12 SKILL IN LASER FABRICATION				
13 SKILL IN POWER & BEAM MEASUREMENT				
14 SKILL IN POWER SUPPLY CONSTRUCTION				
15 SKILL IN USING SPECTROMETERS				
16 WORK EXPERIENCE-LASER TECHNOLOGY				

If the classes listed above are not related to your present work, please check the reason which applies.

1 ☐ You have a job unrelated to classes which you choose to keep.
2 ☐ Skills and knowledge you learned in classes are not adequate for employment in a related job.
3 ☐ Looked for a job related to classes but you could not find one.
4 ☐ Other reason. (Please explain) ____________________

How could the college have prepared you better for employment? Please explain.

____

____

____

PLEASE BE SURE THAT YOU HAVE ANSWERED THE EMPLOYMENT QUESTIONS ON THE OTHER SIDE OF THIS FORM.

That is all the questions; thank you for taking the trouble to complete this form.

Please mail it in the enclosed envelope; no stamp is necessary.

SAN JOSE CITY COLLEGE

Vocational Program Follow-up System—Employment Survey

To the student: We need your help. This is the questionnaire you were told you would be asked to complete describing the relationship between the classes you took at the college and your employment. The information you provide us will be treated confidentially; it will only be used to evaluate our instructional programs, to advise students, and to complete required statistical reports.

Are you presently attending college? Please check [✓] one:

1 ☐ Attending college ______________________________ (Please name the college)

2 ☐ Not attending college

What is your employment status? Please check [✓] one:

1 ☐ Working full time (35 hours or more per week)

2 ☐ Working part time (less than 35 hours per week)

3 ☐ Not working and seeking work

4 ☐ Not working and not seeking work

* * *

If you are not working, it is still important to hear from you; please answer the last question on the back side of the form.

* * *

What is your job title? ______________________ ☐ Check here if you are in the military service

What is the name and location of the business or agency where you are employed?

Business/Agency Name ______________________

Street ______________________ City ______________________

Zip ______________ Telephone (______) ______________________

Did you receive help from the college in getting your present job?

1 ☐ Instructor 2 ☐ Placement Office 3 ☐ Work Experience 4 ☐ Other 5 ☐ No help

Please explain. ______________________

Have you completed a degree or certificate in a vocational program at this college?

Check [✓] one: 1 ☐ Degree 2 ☐ Certificate 3 ☐ Neither

If you checked numbers one or two, which program? ______________________

If you are employed full time in a job related to classes you have taken at this college, it is very important to us to know the answer to the following questions.

What is your gross salary (without overtime)?

$________ per hour *(Fill in one of the three blanks)*

$________ per week

$________ per month

How many hours do you normally work per week?

________ hours

Please answer the questions related to your college classes on the back of this form.

EMPLOYMENT QUESTIONS

Please answer the following questions regarding your present employment.

What is your employment status? Please check [✓] one:
1 ☐ **Working full time (35 hours or more per week)**
2 ☐ **Working part time (less than 35 hours per week)**
3 ☐ **Not working**

* * *

If you are not now working, you need not answer any more questions. Thank you for your time.

* * *

What is your job title? ____________________

What is the name and location of the business or agency where you are employed?

Business/Agency Name ____________________

Street ____________________ City ____________________

Zip ____________________ Telephone (______) ____________________

Which single statement best describes your job? Please check [✓] only one:
1 ☐ **Working in a job related to the classes you took or are taking at the college.**
2 ☐ **Not working in a job related to the classes you took or are taking at the college.**

Do you plan to keep this job after you complete college?
1 ☐ **Yes** 2 ☐ **No** 3 ☐ **Not sure**

Did you receive help from the college in getting your present job?
1 ☐ **Instructor** 2 ☐ **Placement Office** 3 ☐ **Work Experience** 4 ☐ **Other** 5 ☐ **No help**

Please explain. ____________________

If you are employed full time in a job related to classes you have taken at this college, it is very important to us to know the answer to the following questions.

What is your gross salary (without overtime)?

$ ________ **per hour** ***(Fill in one of the three blanks)***

$ ________ **per week**

$ ________ **per month**

How many hours do you normally work per week?

________ **hours**

---

*That is all the questions; **thank you** for taking the trouble to complete this form.*
We will be in touch six months after you leave the college.

CONTRA COSTA COLLEGE

Vocational Program Follow-up System
Classroom Survey

To the student: We need your help. This is the first of two questionnaires you will be asked to complete describing the relationship between the classes you take here at the college and your employment. The next questionnaire will come to you in the mail about six months after you have left the college. The information you provide us will be treated confidentially; it will only be used to evaluate our instructional programs, to advise students, and to complete required statistical reports.

Please print all of your responses clearly.

Name ______________________________ **Student I.D. No.** ______________
FIRST MIDDLE LAST

---

* * * *

If you have completed this questionnaire in another class, you can ***stop here****. Thank you for your help.*

* * * *

If you are still reading, we need an address and telephone number where you can be contacted six months after you leave the college. If you don't know where you will be living, how about the address of a parent, grandparent, or close friend who will know where you are?

Street ______________________________ **City** ______________

Zip Code ______________ **Telephone (**______**)** ______________

We know how much you will like answering the next questions, but state and federal statistical reports require the information.

Sex; check [✓] one:
1 ☐ **Male**
2 ☐ **Female**

Ethnic Background; check [✓] only one:
1 ☐ **American Indian**
2 ☐ **Asian**
3 ☐ **Black**
4 ☐ **Filipino**
5 ☐ **Hispanic**
6 ☐ **White**
7 ☐ **Pacific Islander**
8 ☐ **Other**

Do you plan to complete a degree or certificate in a vocational program at this college?
Check [✓] one: 1 ☐ **Degree** 2 ☐ **Certificate** 3 ☐ **Neither**

If you checked numbers one or two, which program? ______________________________

Please check [✓] the **one** category which best describes your purpose for attending college:
1 ☐ **To prepare for employment in a new career.**
2 ☐ **To prepare for a job change or advancement in the same career.**
3 ☐ **To improve your ability to perform at your present job.**
4 ☐ **To maintain a license or certificate.**
5 ☐ **To improve skills but not for employment purposes.**
6 ☐ **To prepare to transfer to a four year college.**
7 ☐ **To achieve a purpose which is not listed.**

* * * *

Please answer the employment questions on the back of this form.

.010000 AGRICULURE & NATURAL RESOURCES 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
010210	ANIMAL SCIENCE	33	0 0%	7 29%	11 46%	5 21%	1 4%	0 0%	9
010240	PLANT SCIENCE	91	1 2%	14 30%	20 43%	8 17%	1 2%	2 4%	45
010242	VITICULTURE	40	0 0%	8 42%	8 42%	3 16%	0 0%	0 0%	21
010245	FRUIT & NUT PRODUCTION	1	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	0
010900	ORNAMENTAL HORTICULTURE	53	0 0%	12 50%	7 29%	3 13%	0 0%	2 8%	29
010912	HORTICULTURE - NURSERY MANAGEMENT	51	0 0%	26 58%	12 27%	2 4%	1 2%	4 9%	6
010916	HORTICULTURE - LANDSCAPE DESIGN	43	0 0%	13 42%	12 39%	3 10%	2 6%	1 3%	12
011210	AGRIBUSINESS	82	0 0%	16 37%	19 44%	6 14%	1 2%	1 2%	39
011270	ANIMAL GROOMING & TRAINING	11	0 0%	4 44%	3 33%	1 11%	0 0%	1 11%	2
011400	FORESTRY	79	0 0%	9 18%	30 60%	7 14%	3 6%	1 2%	29
011420	FOREST PROTECTION	15	0 0%	2 25%	4 50%	0 0%	2 25%	0 0%	7
011520	NATURAL RESOURCES RECREATION	6	0 0%	0 0%	1 33%	2 67%	0 0%	0 0%	3

010000 AGRICULURE & NATURAL RESOURCES 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
011610	MECHANIZED AGRICULTURE	118	0	22	20	10	5	4	57
			0%	36%	33%	16%	8%	7%	
	TOTALS	623	1	134	147	50	16	16	259
			0%	37%	40%	14%	4%	4%	

020000 ARCHITECTURE & ENVIRONMENTAL DESIGN 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
020300	INTERIOR DESIGN	36	0 0%	7 26%	9 33%	8 30%	1 4%	2 7%	9
	TOTALS	36	0 0%	7 26%	9 33%	8 30%	1 4%	2 7%	9

050000 BUSINESS & MANAGEMENT 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
050200	ACCOUNTING	1386	16 2%	364 37%	377 38%	143 15%	45 5%	37 4%	404
050400	BANKING & FINANCE	126	0 0%	60 63%	15 16%	9 9%	8 8%	4 4%	30
050440	CASHIERING / BANK TELLERING	94	0 0%	24 35%	41 59%	0 0%	3 4%	1 1%	25
050600	BUSINESS MANAGEMENT	187	6 4%	64 47%	53 39%	7 5%	5 4%	2 1%	50
050610	SMALL BUSINESS MANAGEMENT	134	1 1%	48 47%	40 39%	6 6%	4 4%	3 3%	32
050630	MANAGEMENT/SUPERVISION	1154	1 0%	426 57%	260 35%	36 5%	15 2%	11 1%	405
050635	MANAGEMENT/SUPERVISION	11	0 0%	8 100%	0 0%	0 0%	0 0%	0 0%	3
050970	MARKETING	713	16 4%	199 46%	170 39%	29 7%	8 2%	10 2%	281
051200	INSURANCE	7	0 0%	5 100%	0 0%	0 0%	0 0%	0 0%	2
051410	SECRETARIAL STUDIES - LEGAL	78	0 0%	29 49%	17 29%	4 7%	2 3%	7 12%	19
051420	SECRETARIAL STUDIES - MEDICAL	474	1 0%	104 32%	119 36%	58 18%	24 7%	24 7%	144
051430	COURT REPORTING	43	3 8%	7 19%	23 62%	3 8%	0 0%	1 3%	6

050000 BUSINESS & MANAGEMENT 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
051440	ADMINISTRATIVE SECRETARY	332	2 1%	138 59%	51 22%	21 9%	15 6%	7 3%	98
051450	OFFICE CLERK	1078	12 2%	303 42%	214 30%	74 10%	62 9%	51 7%	362
051455	OFFICE MACHINES	16	0 0%	0 0%	7 88%	0 0%	0 0%	1 13%	8
051470	WORD PROCESSING	109	0 0%	50 54%	27 29%	8 9%	2 2%	6 6%	16
	TOTALS	5942	58 1%	1829 45%	1414 35%	398 10%	193 5%	165 4%	1885

060000 COMMUNICATIONS 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
060200	JOURNALISM	31	0	5	13	5	1	0	7
			0%	21%	54%	21%	4%	0%	
060300	TELEVISION JOURNALISM	22	0	4	4	2	1	0	11
			0%	36%	36%	18%	9%	0%	
	TOTALS	53	0	9	17	7	2	0	18
			0%	26%	49%	20%	6%	0%	

070000 COMPUTER & INFORMATION SCIENCE 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
070100	COMPUTER & INFORMATION SCIENCE	42	0 0%	11 37%	13 43%	2 7%	3 10%	1 3%	12
070300	DATA PROCESSING - COMPUTER OPERATOR	259	12 6%	71 38%	74 39%	18 10%	6 3%	7 4%	71
070410	DATA PROCESSING PROGRAMMER - (BUS)	1668	1 0%	391 36%	453 42%	148 14%	48 4%	43 4%	584
	TOTALS	1969	13 1%	473 36%	540 41%	168 13%	57 4%	51 4%	667

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
080820	SIGN LANGUAGE STUDIES	44	0 0%	10 34%	12 41%	4 14%	0 0%	3 10%	15
	TOTALS	44	0 0%	10 34%	12 41%	4 14%	0 0%	3 10%	15

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
092510	CIVIL ENGINEERING TECH	102	0 0%	28 48%	22 38%	6 10%	1 2%	1 2%	44
093400	ELECTRONICS	894	1 0%	241 48%	182 36%	60 12%	19 4%	4 1%	387
093409	ELECTRONICS ASSEMBLER	136	0 0%	45 42%	25 24%	30 28%	2 2%	4 4%	30
093410	ELECTRONIC TECHNOLOGY - MICROWAVE	118	0 0%	34 53%	24 38%	4 6%	2 3%	0 0%	54
093420	INDUSTRIAL ELECTRONICS	46	0 0%	31 84%	4 11%	0 0%	1 3%	1 3%	9
093430	ELECTRONICS - TELEVISION SERVICE	6	0 0%	1 50%	1 50%	0 0%	0 0%	0 0%	4
093450	ELECTRIC POWER DISTRIBUTION	14	2 15%	9 69%	2 15%	0 0%	0 0%	0 0%	1
093460	COMPUTER ELECTRONCIS	547	1 0%	171 49%	118 34%	39 11%	13 4%	10 3%	195
093465	COMPUTER ELECTRONCIS	68	0 0%	25 69%	8 22%	2 6%	1 3%	0 0%	32
093480	LASER TECHNOLOGY	39	0 0%	19 68%	8 29%	0 0%	1 4%	0 0%	11
093510	APPLIANCE REPAIR	23	0 0%	7 41%	7 41%	0 0%	0 0%	3 18%	6
094510	AIR CONDITIONING & REFRIGERATION	99	0 0%	43 67%	18 28%	1 2%	2 3%	0 0%	35

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
094550	SOLAR TECHNOLOGY	23	0 0%	6 46%	5 38%	2 15%	0 0%	0 0%	10
094710	DIESEL MECHANICS	196	0 0%	69 51%	54 40%	5 4%	6 4%	1 1%	61
094810	AUTOMOTIVE MECHANICS	1159	14 2%	273 40%	290 42%	57 8%	33 5%	24 3%	468
094811	AUTO MECHANICS - IMPORTED AUTOS	18	0 0%	1 7%	6 43%	2 14%	5 36%	0 0%	4
094820	AUTO BODY & FENDER	273	3 2%	50 30%	92 55%	13 8%	5 3%	5 3%	105
094830	SMALL ENGINE REPAIR	32	1 4%	6 22%	13 48%	2 7%	3 11%	2 7%	5
094831	MOTORCYCLE REPAIR	27	0 0%	2 11%	14 78%	0 0%	1 6%	1 6%	9
095000	AIRCRAFT MAINTENANCE	42	0 0%	2 10%	6 29%	5 24%	7 33%	1 5%	21
095010	AIRCRAFT MECHANICS - AIRFRAME	9	0 0%	2 33%	4 67%	0 0%	0 0%	0 0%	3
095011	AIRCRAFT PRODUCTION	6	0 0%	1 25%	3 75%	0 0%	0 0%	0 0%	2
095020	AIRCRAFT MECHANICS - POWERPLANT	32	0 0%	5 31%	11 69%	0 0%	0 0%	0 0%	16
095040	AIRCRAFT ELECTRONICS	7	0 0%	0 0%	4 80%	0 0%	1 20%	0 0%	2

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
095200	CONSTRUCTION - GENERAL BUILDING	80	0 0%	24 48%	22 44%	2 4%	0 0%	2 4%	30
095210	CONSTRUCTION - CARPENTRY	16	0 0%	2 18%	8 73%	1 9%	0 0%	0 0%	5
095250	MILL & CABINET TECHNOLOGY	60	4 11%	5 14%	20 56%	4 11%	3 8%	0 0%	24
095300	DRAFTING TECHNOLOGY	631	2 1%	102 29%	162 47%	58 17%	11 3%	11 3%	285
095310	ARCHITECTURAL TECHNOLOGY	112	0 0%	23 33%	24 35%	16 23%	6 9%	0 0%	43
095351	DESIGN DRAFTING - PRESSURE PIPING	7	1 25%	1 25%	2 50%	0 0%	0 0%	0 0%	3
095604	MANUFACTURING TECHNOLOGY	67	2 3%	43 72%	14 23%	0 0%	0 0%	1 2%	7
095610	METALLURGICAL TECHNOLOGY	37	0 0%	15 56%	4 15%	4 15%	3 11%	1 4%	10
095611	CHROME PLATING & METAL FINISHING	3	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	3
095620	STRUCTURAL STEEL FABRICATION	7	1 20%	3 60%	1 20%	0 0%	0 0%	0 0%	2
095630	MACHINE TOOL TECHNOLOGY	273	6 4%	89 54%	45 27%	19 11%	6 4%	1 1%	107
095637	MACHINE TOOL - NUMERICAL CONTROL	50	3 9%	21 62%	6 18%	3 9%	0 0%	1 3%	16

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
095650	WELDING & CUTTING	460	1 0%	135 45%	111 37%	28 9%	20 7%	5 2%	160
095680	INDUSTRIAL QUALITY CONTROL	22	0 0%	16 80%	3 15%	0 0%	0 0%	1 5%	2
095681	NONDESTRUCTIVE TESTING	62	0 0%	7 29%	8 33%	4 17%	3 13%	2 8%	38
095700	CONSTRUCTION TECHNOLOGY	26	3 16%	6 32%	5 26%	3 16%	2 11%	0 0%	7
095710	CONSTRUCTION MANAGEMENT	131	0 0%	49 59%	24 29%	7 8%	1 1%	2 2%	48
095720	CONSTRUCTION TECHNOLOGY	63	0 0%	10 45%	7 32%	2 9%	2 9%	1 5%	41
095810	WATER & WASTE WATER TREATMENT	75	0 0%	30 73%	7 17%	1 2%	2 5%	1 2%	34
	TOTALS	6098	45 1%	1652 44%	1394 37%	380 10%	162 4%	86 2%	2379

100000 FINE & APPLIED ARTS 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
100920	COMMERCIAL ARTS	13	0 0%	0 0%	4 100%	0 0%	0 0%	0 0%	9
101100	PHOTOGRAPHY	90	1 2%	10 15%	39 59%	3 5%	9 14%	4 6%	24
103000	GRAPHIC ARTS	14	0 0%	4 50%	2 25%	2 25%	0 0%	0 0%	6
	TOTALS	117	1 1%	14 18%	45 58%	5 6%	9 12%	4 5%	39

120000 HEALTH PROFESSIONS 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
120310	NURSING - REGISTERED NURSE	815	7 1%	442 75%	65 11%	45 8%	17 3%	15 3%	224
120320	LICENSED VOCATIONAL NURSE	263	1 1%	129 74%	14 8%	11 6%	13 7%	7 4%	88
120330	NURSES AIDE	110	0 0%	31 46%	18 27%	8 12%	6 9%	4 6%	43
120335	NURSES AIDE - CENTRAL SUPPLY	14	0 0%	4 40%	3 30%	0 0%	1 10%	2 20%	4
120370	MEDICAL ASSISTING	74	4 7%	18 30%	28 46%	3 5%	4 7%	4 7%	13
120410	DENTAL ASSISTING	185	2 2%	80 65%	16 13%	13 10%	6 5%	7 6%	61
120420	DENTAL HYGIENE	54	0 0%	31 91%	0 0%	3 9%	0 0%	0 0%	20
120430	DENTAL LABORATORY TECHNICIAN	4	0 0%	0 0%	4 100%	0 0%	0 0%	0 0%	0
120521	MEDICAL EQUIPMENT TECH - MICROSCOPY	8	0 0%	4 57%	1 14%	1 14%	1 14%	0 0%	1
120730	RESPIRATORY THERAPY	84	0 0%	35 67%	12 23%	1 2%	3 6%	1 2%	32
120910	OPTICAL TECHNOLOGY	10	0 0%	4 50%	4 50%	0 0%	0 0%	0 0%	2
121110	PHARMACY TECHNICAN	4	0 0%	3 75%	1 25%	0 0%	0 0%	0 0%	0

120000 HEALTH PROFESSIONS 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
121220	PHYSICAL THERAPY ASSISTANT	24	3 13%	18 75%	2 8%	1 4%	0 0%	0 0%	0
121510	MEDICAL RECORDS T- ECHNOLOGY - CANCER	23	0 0%	9 60%	1 7%	3 20%	2 13%	0 0%	8
122500	RADIOLOGICAL TECHNOLOGY	4	0 0%	4 100%	0 0%	0 0%	0 0%	0 0%	0
123900	PSYCHIATRIC TECHNICIAN	29	0 0%	14 93%	1 7%	0 0%	0 0%	0 0%	14
125010	PARAMEDICAL TECHNICIAN	57	0 0%	21 50%	14 33%	4 10%	3 7%	0 0%	15
125020	EMERGENCY MEDICAL TECH - AMBULANCE	307	3 2%	84 43%	87 44%	14 7%	9 5%	0 0%	110
	TOTALS	2069	20 1%	931 65%	271 19%	107 7%	65 5%	40 3%	635

13000 CONSUMER EDUCATION & HOME ECONOMICS 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
130300	CLOTHING & TEXTILES	22	0 0%	0 0%	5 38%	4 31%	3 23%	1 8%	9
130310	CLOTHING & DESIGN	22	0 0%	3 14%	10 48%	3 14%	1 5%	4 19%	1
130320	FASHION MERCHANDISING	124	0 0%	18 23%	36 46%	14 18%	2 3%	8 10%	46
130620	DIETETICS	122	0 0%	21 32%	27 41%	11 17%	2 3%	5 8%	56
	TOTALS	290	0 0%	42 24%	78 44%	32 18%	8 4%	18 10%	112

140000 LAW 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
			JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
140110 LEGAL ASSISTING	88	0	26	23	8	1	4	26
		0%	42%	37%	13%	2%	6%	
TOTALS	88	0	26	23	8	1	4	26
		0%	42%	37%	13%	2%	6%	

160000 LIBRARY SCIENCE 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
160110	LIBRARY TECHNOLOGY	12	0 0%	5 56%	3 33%	0 0%	1 11%	0 0%	3
	TOTALS	12	0 0%	5 56%	3 33%	0 0%	1 11%	0 0%	3

.210000 PUBLIC AFFAIRS & SERVICES 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

				EMPLOYED			UNEMPLOYED		
TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	JOB IS RELATED	JOB NOT RELATED	ATTENDS COLLEGE	SEEKING WORK	NOT SEEKING	UNKNOWN
210500	ADMINISTRATION OF JUSTICE	797	7 1%	182 36%	228 45%	57 11%	18 4%	12 2%	293
210550	ADMINISTRATION OF JUSTICE - ACADEMY	426	0 0%	234 78%	54 18%	5 2%	5 2%	3 1%	125
210700	HUMAN SERVICES	10	0 0%	2 29%	4 57%	1 14%	0 0%	0 0%	3
210720	EARLY CHILDHOOD EDUCATION	652	2 0%	276 59%	104 22%	41 9%	17 4%	29 6%	183
210750	INSTRUCTIONAL AIDE - CLASSROOM	20	0 0%	14 78%	4 22%	0 0%	0 0%	0 0%	2
210754	INSTRUCTIONAL AIDE - SPECIAL ED	20	4 29%	6 43%	4 29%	0 0%	0 0%	0 0%	6
210760	RECREATION ASSISTANT	46	0 0%	4 13%	17 57%	6 20%	1 3%	2 7%	16
213300	FIRE CONTROL TECHNOLOGY	495	2 1%	184 51%	146 41%	12 3%	12 3%	2 1%	137
	TOTALS	2466	15 1%	902 53%	561 33%	122 7%	53 3%	48 3%	765

300000 COMMERCIAL SERVICES 2404A-7A ALL STUDENTS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
300210	FOOD SERVICES - CHEF TRAINING	59	0	20	10	1	4	3	21
			0%	53%	26%	3%	11%	8%	
300211	FOOD SERVICES - BAKING	3	0	2	1	0	0	0	0
			0%	67%	33%	0%	0%	0%	
300250	FOOD SERVICES - RESTAURANT MGMT	28	0	7	5	1	1	4	10
			0%	39%	28%	6%	6%	22%	
300400	ADMINISTRATIVE HOUSEKEEPING	36	0	12	8	2	1	3	10
			0%	46%	31%	8%	4%	12%	
300700	COSMETOLOGY	242	5	66	42	15	12	9	93
			3%	44%	28%	10%	8%	6%	
300910	FLIGHT ATTENDANT	22	0	1	7	2	0	0	12
			0%	10%	70%	20%	0%	0%	
300930	TRAVEL AGENCY OPERATIONS	348	0	80	69	12	8	14	165
			0%	44%	38%	7%	4%	8%	
	TOTALS	738	5	188	142	33	26	33	311
			1%	44%	33%	8%	6%	8%	
TOTAL FOR ALL PROGRAMS		20545	158	6222	4656	1322	594	470	7123
			1%	46%	35%	10%	4%	4%	

116

117

010000 AGRICULURE & NATURAL RESOURCES   2404A-7A COMPLETERS   AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
010210	ANIMAL SCIENCE	6	0 0%	1 25%	2 50%	1 25%	0 0%	0 0%	2
010240	PLANT SCIENCE	15	0 0%	3 33%	4 44%	2 22%	0 0%	0 0%	6
010242	VITICULTURE	33	0 0%	8 47%	7 41%	2 12%	0 0%	0 0%	16
010900	ORNAMENTAL HORTICULTURE	24	0 0%	6 46%	4 31%	1 8%	0 0%	2 15%	11
010912	HORTICULTURE - NURSERY MANAGEMENT	35	0 0%	22 67%	7 21%	1 3%	1 3%	2 6%	2
010916	HORTICULTURE - LANDSCAPE DESIGN	22	0 0%	5 38%	6 46%	0 0%	1 8%	1 8%	9
011210	AGRIBUSINESS	42	0 0%	12 50%	9 38%	2 8%	1 4%	0 0%	18
011270	ANIMAL GROOMING & TRAINING	3	0 0%	3 100%	0 0%	0 0%	0 0%	0 0%	0
011400	FORESTRY	31	0 0%	5 22%	15 65%	3 13%	0 0%	0 0%	8
011420	FOREST PROTECTION	6	0 0%	2 67%	1 33%	0 0%	0 0%	0 0%	3
011520	NATURAL RESOURCES RECREATION	1	0 0%	0 0%	1 100%	0 0%	0 0%	0 0%	0
011610	MECHANIZED AGRICULTURE	76	0 0%	14 41%	10 29%	5 15%	4 12%	1 3%	42

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
	TOTALS	294	0 0%	81 46%	66 37%	17 10%	7 4%	6 3%	117

020000 ARCHITECTURE & ENVIRONMENTAL DESIGN 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
020300	INTERIOR DESIGN	15	0 0%	5 45%	2 18%	4 36%	0 0%	0 0%	4
	TOTALS	15	0 0%	5 45%	2 18%	4 36%	0 0%	0 0%	4

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
050200	ACCOUNTING	572	7 2%	173 42%	148 36%	55 13%	13 3%	16 4%	160
050400	BANKING & FINANCE	71	0 0%	33 62%	10 19%	4 8%	3 6%	3 6%	18
050440	CASHIERING / BANK TELLERING	13	0 0%	2 29%	4 57%	0 0%	1 14%	0 0%	6
050600	BUSINESS MANAGEMENT	81	4 6%	34 52%	25 38%	2 3%	1 2%	0 0%	15
050610	SMALL BUSINESS MANAGEMENT	70	0 0%	26 49%	20 38%	3 6%	2 4%	2 4%	17
050630	MANAGEMENT/SUPERV-ISION	475	1 0%	188 59%	101 31%	15 5%	7 2%	9 3%	154
050635	MANAGEMENT/SUPERV-ISION	11	0 0%	8 100%	0 0%	0 0%	0 0%	0 0%	3
050970	MARKETING	234	2 1%	68 49%	56 40%	8 6%	4 3%	1 1%	95
051200	INSURANCE	1	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	0
051410	SECRETARIAL STUDIES - LEGAL	66	0 0%	26 53%	12 24%	4 8%	2 4%	5 10%	17
051420	SECRETARIAL STUDIES - MEDICAL	201	1 1%	56 41%	40 29%	15 11%	15 11%	10 7%	64
051430	COURT REPORTING	6	0 0%	2 40%	3 60%	0 0%	0 0%	0 0%	1

050000 BUSINESS & MANAGEMENT 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	NOT SEEKING	UNKNOWN
051440	ADMINISTRATIVE SECRETARY	156	1	71	23	12	6	3	40
			1%	61%	20%	10%	5%	3%	
051450	OFFICE CLERK	438	0	143	74	25	22	16	158
			0%	51%	26%	9%	8%	6%	
051470	WORD PROCESSING	76	0	34	17	7	0	6	12
			0%	53%	27%	11%	0%	9%	
	TOTALS	2471	16	865	533	150	76	71	760
			1%	51%	31%	9%	4%	4%	

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
060200	JOURNALISM	10	0 0%	1 14%	4 57%	1 14%	1 14%	0 0%	3
060300	TELEVISION JOURNALISM	9	0 0%	2 50%	0 0%	1 25%	1 25%	0 0%	5
	TOTALS	19	0 0%	3 27%	4 36%	2 18%	2 18%	0 0%	8

070000 COMPUTER & INFORMATION SCIENCE 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
070100	COMPUTER & INFORMATION SCIENCE	15	0 0%	5 45%	5 45%	0 0%	1 9%	0 0%	4
070300	DATA PROCESSING - COMPUTER OPERATOR	134	6 6%	48 48%	32 32%	7 7%	3 3%	5 5%	33
070410	DATA PROCESSING PROGRAMMER - (BUS)	839	0 0%	241 42%	218 38%	66 11%	28 5%	26 4%	260
	TOTALS	988	6 1%	294 43%	255 37%	73 11%	32 5%	31 4%	297

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
080820	SIGN LANGUAGE STUDIES	28	0 0%	9 43%	7 33%	2 10%	0 0%	3 14%	7
	TOTALS	28	0 0%	9 43%	7 33%	2 10%	0 0%	3 14%	7

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
092510	CIVIL ENGINEERING TECH	34	0 0%	13 68%	6 32%	0 0%	0 0%	0 0%	15
093400	ELECTRONICS	503	1 0%	167 54%	96 31%	31 10%	13 4%	3 1%	192
093409	ELECTRONICS ASSEMBLER	41	0 0%	15 47%	6 19%	7 22%	1 3%	3 9%	9
093410	ELECTRONIC TECHNOLOGY - MICROWAVE	110	0 0%	33 53%	23 37%	4 6%	2 3%	0 0%	48
093420	INDUSTRIAL ELECTRONICS	43	0 0%	29 85%	4 12%	0 0%	0 0%	1 3%	9
093430	ELECTRONICS - TELEVISION SERVICE	6	0 0%	1 50%	1 50%	0 0%	0 0%	0 0%	4
093450	ELECTRIC POWER DISTRIBUTION	14	2 15%	9 69%	2 15%	0 0%	0 0%	0 0%	1
093460	COMPUTER ELECTRONCIS	459	1 0%	138 48%	94 33%	34 12%	11 4%	8 3%	173
093465	COMPUTER ELECTRONCIS	41	0 0%	13 65%	6 30%	0 0%	1 5%	0 0%	21
093480	LASER TECHNOLOGY	32	0 0%	15 65%	7 30%	0 0%	1 4%	0 0%	9
093510	APPLIANCE REPAIR	19	0 0%	7 50%	4 29%	0 0%	0 0%	3 21%	5
094510	AIR CONDITIONING & REFRIGERATION	64	0 0%	33 72%	11 24%	1 2%	1 2%	0 0%	18

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
094550	SOLAR TECHNOLOGY	20	0 0%	5 42%	5 42%	2 17%	0 0%	0 0%	8
094710	DIESEL MECHANICS	153	0 0%	61 54%	44 39%	4 4%	5 4%	0 0%	39
094810	AUTOMOTIVE MECHANICS	633	2 1%	183 46%	145 36%	33 8%	22 6%	13 3%	235
094811	AUTO MECHANICS - IMPORTED AUTOS	7	0 0%	0 0%	3 60%	1 20%	1 20%	0 0%	2
094820	AUTO BODY & FENDER	135	0 0%	33 40%	40 49%	5 6%	2 2%	2 2%	53
094830	SMALL ENGINE REPAIR	9	0 0%	2 29%	5 71%	0 0%	0 0%	0 0%	2
094831	MOTORCYCLE REPAIR	8	0 0%	1 14%	5 71%	0 0%	1 14%	0 0%	1
095000	AIRCRAFT MAINTENANCE	22	0 0%	1 8%	4 31%	3 23%	5 38%	0 0%	9
095010	AIRCRAFT MECHANICS - AIRFRAME	9	0 0%	2 33%	4 67%	0 0%	0 0%	0 0%	3
095011	AIRCRAFT PRODUCTION	2	0 0%	1 50%	1 50%	0 0%	0 0%	0 0%	0
095020	AIRCRAFT MECHANICS - POWERPLANT	26	0 0%	5 38%	8 62%	0 0%	0 0%	0 0%	13
095040	AIRCRAFT ELECTRONICS	2	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
095200	CONSTRUCTION - GENERAL BUILDING	51	0 0%	18 55%	12 36%	2 6%	0 0%	1 3%	18
095210	CONSTRUCTION - CARPENTRY	10	0 0%	1 13%	6 75%	1 13%	0 0%	0 0%	2
095250	MILL & CABINET TECHNOLOGY	35	4 19%	4 19%	9 43%	2 10%	2 10%	0 0%	14
095300	DRAFTING TECHNOLOGY	305	1 1%	58 31%	78 42%	34 18%	9 5%	6 3%	119
095310	ARCHITECTURAL TECHNOLOGY	58	0 0%	15 42%	10 28%	7 19%	4 11%	0 0%	22
095604	MANUFACTURING TECHNOLOGY	40	1 3%	23 66%	10 29%	0 0%	0 0%	1 3%	5
095610	METALLURGICAL TECHNOLOGY	30	0 0%	13 62%	3 14%	2 10%	3 14%	0 0%	9
095611	CHROME PLATING & METAL FINISHING	2	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	2
095630	MACHINE TOOL TECHNOLOGY	154	0 0%	63 62%	22 22%	13 13%	3 3%	0 0%	53
095637	MACHINE TOOL - NUMERICAL CONTROL	34	3 12%	16 62%	5 19%	1 4%	0 0%	1 4%	8
095650	WELDING & CUTTING	296	0 0%	95 49%	66 34%	19 10%	10 5%	2 1%	104
095680	INDUSTRIAL QUALITY CONTROL	9	0 0%	6 75%	2 25%	0 0%	0 0%	0 0%	1

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
095681	NONDESTRUCTIVE TESTING	54	0 0%	7 35%	6 30%	2 10%	3 15%	2 10%	34
095700	CONSTRUCTION TECHNOLOGY	7	0 0%	1 25%	1 25%	1 25%	1 25%	0 0%	3
095710	CONSTRUCTION MANAGEMENT	75	0 0%	40 71%	9 16%	4 7%	1 2%	2 4%	19
095720	CONSTRUCTION TECHNOLOGY	59	0 0%	10 50%	5 25%	2 10%	2 10%	1 5%	39
095810	WATER & WASTE WATER TREATMENT	53	0 0%	25 83%	2 7%	0 0%	2 7%	1 3%	23
	TOTALS	3464	15 1%	1162 50%	770 33%	215 9%	106 5%	50 2%	1346

100000 FINE & APPLIED ARTS 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
100920	COMMERCIAL ARTS	13	0 0%	0 0%	4 100%	0 0%	0 0%	0 0%	9
101100	PHOTOGRAPHY	35	0 0%	7 27%	17 65%	1 4%	0 0%	1 4%	9
103000	GRAPHIC ARTS	14	0 0%	4 50%	2 25%	2 25%	0 0%	0 0%	6
	TOTALS	62	0 0%	11 29%	23 61%	3 8%	0 0%	1 3%	24

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED: JOB IS RELATED	EMPLOYED: JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED: SEEKING WORK	UNEMPLOYED: NOT SEEKING	UNKNOWN
120310	NURSING - REGISTERED NURSE	723	7 1%	406 76%	58 11%	33 6%	17 3%	13 2%	169
120320	LICENSED VOCATIONAL NURSE	231	1 1%	124 78%	12 8%	9 6%	10 6%	4 3%	71
120330	NURSES AIDE	73	0 0%	27 55%	14 29%	0 0%	5 10%	3 6%	24
120335	NURSES AIDE - CENTRAL SUPPLY	14	0 0%	4 40%	3 30%	0 0%	1 10%	2 20%	4
120370	MEDICAL ASSISTING	20	0 0%	12 67%	5 28%	1 6%	0 0%	0 0%	2
120410	DENTAL ASSISTING	158	0 0%	75 68%	12 11%	12 11%	4 4%	7 6%	48
120420	DENTAL HYGIENE	49	0 0%	31 91%	0 0%	3 9%	0 0%	0 0%	15
120430	DENTAL LABORATORY TECHNICIAN	4	0 0%	0 0%	4 100%	0 0%	0 0%	0 0%	0
120521	MEDICAL EQUIPMENT TECH - MICROSCOPY	1	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	0
120730	RESPIRATORY THERAPY	82	0 0%	35 69%	12 24%	1 2%	3 6%	0 0%	31
120910	OPTICAL TECHNOLOGY	2	0 0%	0 0%	2 100%	0 0%	0 0%	0 0%	0
121110	PHARMACY TECHNICAN	4	0 0%	3 75%	1 25%	0 0%	0 0%	0 0%	0

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
121220	PHYSICAL THERAPY ASSISTANT	21	3 14%	16 76%	1 5%	1 5%	0 0%	0 0%	0
121510	MEDICAL RECORDS T-ECHNOLOGY - CANCER	19	0 0%	9 69%	0 0%	3 23%	1 8%	0 0%	6
122500	RADIOLOGICAL TECHNOLOGY	4	0 0%	4 100%	0 0%	0 0%	0 0%	0 0%	0
123900	PSYCHIATRIC TECHNICIAN	9	0 0%	8 89%	1 11%	0 0%	0 0%	0 0%	0
125010	PARAMEDICAL TECHNICIAN	44	0 0%	18 55%	8 24%	4 12%	3 9%	0 0%	11
125020	EMERGENCY MEDICAL TECH - AMBULANCE	261	3 2%	75 43%	80 45%	10 6%	8 5%	0 0%	85
	TOTALS	1719	14 1%	848 69%	213 17%	77 6%	52 4%	29 2%	486

13000 CONSUMER EDUCATION & HOME ECONOMICS 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
130300	CLOTHING & TEXTILES	14	0 0%	0 0%	4 57%	1 14%	1 14%	1 14%	7
130310	CLOTHING & DESIGN	16	0 0%	2 13%	8 53%	3 20%	0 0%	2 13%	1
130320	FASHION MERCHANDISING	65	0 0%	6 16%	17 45%	9 24%	2 5%	4 11%	27
130620	DIETETICS	50	0 0%	12 52%	4 17%	6 26%	1 4%	0 0%	27
	TOTALS	145	0 0%	20 24%	33 40%	19 23%	4 5%	7 8%	62

140000 LAW

2404A-7A COMPLETERS

AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
140110	LEGAL ASSISTING	73	0 0%	21 40%	20 38%	7 13%	1 2%	3 6%	21
	TOTALS	73	0 0%	21 40%	20 38%	7 13%	1 2%	3 6%	21

160000 LIBRARY SCIENCE

2404A-7A COMPLETERS

AGGREGATED BY PROGRAM

TOP CODE PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
			JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
160110 LIBRARY TECHNOLOGY	7	0 0%	2 40%	2 40%	0 0%	1 20%	0 0%	2
TOTALS	7	0 0%	2 40%	2 40%	0 0%	1 20%	0 0%	2

210000 PUBLIC AFFAIRS & SERVICES 2404A-7A COMPLETERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
210500	ADMINISTRATION OF JUSTICE	310	0 0%	82 42%	83 42%	19 10%	8 4%	5 3%	113
210550	ADMINISTRATION OF JUSTICE - ACADEMY	360	0 0%	203 77%	53 20%	3 1%	1 0%	3 1%	97
210700	HUMAN SERVICES	9	0 0%	2 29%	4 57%	1 14%	0 0%	0 0%	2
210720	EARLY CHILDHOOD EDUCATION	361	0 0%	174 64%	51 19%	22 8%	11 4%	13 5%	90
210750	INSTRUCTIONAL AIDE - CLASSROOM	2	0 0%	2 100%	0 0%	0 0%	0 0%	0 0%	0
210754	INSTRUCTIONAL AIDE - SPECIAL ED	4	0 0%	3 100%	0 0%	0 0%	0 0%	0 0%	1
210760	RECREATION ASSISTANT	19	0 0%	2 13%	7 47%	4 27%	1 7%	1 7%	4
213300	FIRE CONTROL TECHNOLOGY	370	2 1%	149 55%	105 38%	7 3%	9 3%	1 0%	97
	TOTALS	1435	2 0%	617 60%	303 29%	56 5%	30 3%	23 2%	404

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	 JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	 NOT SEEKING	UNKNOWN
300210	FOOD SERVICES — CHEF TRAINING	44	0 0%	15 50%	8 27%	1 3%	3 10%	3 10%	14
300211	FOOD SERVICES - BAKING	3	0 0%	2 67%	1 33%	0 0%	0 0%	0 0%	0
300250	FOOD SERVICES - RESTAURANT MGMT	8	0 0%	1 20%	2 40%	0 0%	0 0%	2 40%	3
300400	ADMINISTRATIVE HOUSEKEEPING	30	0 0%	11 48%	7 30%	2 9%	0 0%	3 13%	7
300700	COSMETOLOGY	181	0 0%	62 56%	23 21%	8 7%	9 8%	9 8%	70
300910	FLIGHT ATTENDANT	22	0 0%	1 10%	7 70%	2 20%	0 0%	0 0%	12
300950	TRAVEL AGENCY OPERATIONS	155	0 0%	99 51%	29 38%	5 6%	2 3%	2 3%	78
	TOTALS	443	0 0%	131 51%	77 30%	18 7%	14 5%	19 7%	184
TOTAL FOR ALL PROGRAMS		11363	53 1%	4069 53%	2308 30%	643 8%	325 4%	243 3%	3722

156

157

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
010210	ANIMAL SCIENCE	27	0 0%	6 30%	9 45%	4 20%	1 5%	0 0%	7
010240	PLANT SCIENCE	76	1 3%	11 30%	16 43%	6 16%	1 3%	2 5%	39
010242	VITICULTURE	7	0 0%	0 0%	1 50%	1 50%	0 0%	0 0%	5
010245	FRUIT & NUT PRODUCTION	1	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	0
010900	ORNAMENTAL HORTICULTURE	29	0 0%	6 55%	3 27%	2 18%	0 0%	0 0%	18
010912	HORTICULTURE - NURSERY MANAGEMENT	16	0 0%	4 33%	5 42%	1 8%	0 0%	2 17%	4
010916	HORTICULTURE - LANDSCAPE DESIGN	21	0 0%	8 44%	6 33%	3 17%	1 6%	0 0%	3
011210	AGRIBUSINESS	40	0 0%	4 21%	10 53%	4 21%	0 0%	1 5%	21
011270	ANIMAL GROOMING & TRAINING	8	0 0%	1 17%	3 50%	1 17%	0 0%	1 17%	2
011400	FORESTRY	48	0 0%	4 15%	15 56%	4 15%	3 11%	1 4%	21
011420	FOREST PROTECTION	9	0 0%	0 0%	3 60%	0 0%	2 40%	0 0%	4
011520	NATURAL RESOURCES RECREATION	5	0 0%	0 0%	0 0%	2 100%	0 0%	0 0%	3

010000 AGRICULTURE & NATURAL RESOURCES 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
011610	MECHANIZED AGRICULTURE	42	0 0%	8 30%	10 37%	5 19%	1 4%	3 11%	15
	TOTALS	329	1 1%	53 28%	81 43%	33 18%	9 5%	10 5%	142

020000 ARCHITECTURE & ENVIRONMENTAL DESIGN 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
			JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
020300 INTERIOR DESIGN	21	0 0%	2 13%	7 44%	4 25%	1 6%	2 13%	5
TOTALS	21	0 0%	2 13%	7 44%	4 25%	1 6%	2 13%	5

162

163

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
050200	ACCOUNTING	814	9 2%	191 34%	229 40%	88 15%	32 6%	21 4%	244
050400	BANKING & FINANCE	55	0 0%	27 63%	5 12%	5 12%	5 12%	1 2%	12
050440	CASHIERING / BANK TELLERING	81	0 0%	22 35%	37 60%	0 0%	2 3%	1 2%	19
050600	BUSINESS MANAGEMENT	106	2 3%	30 42%	28 39%	5 7%	4 6%	2 3%	35
050610	SMALL BUSINESS MANAGEMENT	64	1 2%	22 45%	20 41%	3 6%	2 4%	1 2%	15
050630	MANAGEMENT/SUPERVISION	679	0 0%	238 56%	159 37%	21 5%	8 2%	2 0%	251
050970	MARKETING	479	14 5%	131 45%	114 39%	21 7%	4 1%	9 3%	186
051200	INSURANCE	6	0 0%	4 100%	0 0%	0 0%	0 0%	0 0%	2
051410	SECRETARIAL STUDIES - LEGAL	12	0 0%	3 30%	5 50%	0 0%	0 0%	2 20%	2
051420	SECRETARIAL STUDIES - MEDICAL	273	0 0%	48 25%	79 41%	43 22%	9 5%	14 7%	80
051430	COURT REPORTING	37	3 9%	5 16%	20 63%	3 9%	0 0%	1 3%	5
051440	ADMINISTRATIVE SECRETARY	176	1 1%	67 57%	28 24%	9 8%	9 8%	4 3%	58

050000 BUSINESS & MANAGEMENT 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
			JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
051450 OFFICE CLERK	640	12 3%	160 37%	140 32%	49 11%	40 9%	35 8%	204
051455 OFFICE MACHINES	16	0 0%	0 0%	7 88%	0 0%	0 0%	1 13%	8
051470 WORD PROCESSING	33	0 0%	16 55%	10 34%	1 3%	2 7%	0 0%	4
TOTALS	3471	42 2%	964 41%	881 38%	248 11%	117 5%	94 4%	1125

060000 COMMUNICATIONS 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
060200	JOURNALISM	21	0 0%	4 24%	9 53%	4 24%	0 0%	0 0%	4
060300	TELEVISION JOURNALISM	13	0 0%	2 29%	4 57%	1 14%	0 0%	0 0%	6
	TOTALS	34	0 0%	6 25%	13 54%	5 21%	0 0%	0 0%	10

169

1[illegible]8

070000 COMPUTER & INFORMATION SCIENCE 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
070100	COMPUTER & INFORMATION SCIENCE	27	0 0%	6 32%	8 42%	2 11%	2 11%	1 5%	8
070300	DATA PROCESSING - COMPUTER OPERATOR	125	6 7%	23 26%	42 48%	11 13%	3 3%	2 2%	38
070410	DATA PROCESSING PROGRAMMER - (BUS)	829	1 0%	150 30%	235 47%	82 16%	20 4%	17 3%	324
	TOTALS	981	7 1%	179 29%	285 47%	95 16%	25 4%	20 3%	370

080000 EDUCATION 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
080820	SIGN LANGUAGE STUDIES	16	0 0%	1 13%	5 63%	2 25%	0 0%	0 0%	8
	TOTALS	16	0 0%	1 13%	5 63%	2 25%	0 0%	0 0%	8

090000 ENGINEERING & RELATED TECHNOLOGY   2404A-7A LEAVERS   AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
092510	CIVIL ENGINEERING TECH	68	0 0%	15 38%	16 41%	6 15%	1 3%	1 3%	29
093400	ELECTRONICS	391	0 0%	74 38%	86 44%	29 15%	6 3%	1 1%	195
093409	ELECTRONICS ASSEMBLER	95	0 0%	30 41%	19 26%	23 31%	1 1%	1 1%	21
093410	ELECTRONIC TECHNOLOGY - MICROWAVE	8	0 0%	1 50%	1 50%	0 0%	0 0%	0 0%	6
093420	INDUSTRIAL ELECTRONICS	3	0 0%	2 67%	0 0%	0 0%	1 33%	0 0%	0
093460	COMPUTER ELECTRONCIS	88	0 0%	33 50%	24 36%	5 8%	2 3%	2 3%	22
093465	COMPUTER ELECTRONCIS	27	0 0%	12 75%	2 13%	2 13%	0 0%	0 0%	11
093480	LASER TECHNOLOGY	7	0 0%	4 80%	1 20%	0 0%	0 0%	0 0%	2
093510	APPLIANCE REPAIR	4	0 0%	0 0%	3 100%	0 0%	0 0%	0 0%	1
094510	AIR CONDITIONING & REFRIGERATION	35	0 0%	10 56%	7 39%	0 0%	1 6%	0 0%	17
094550	SOLAR TECHNOLOGY	3	0 0%	1 100%	0 0%	0 0%	0 0%	0 0%	2
094710	DIESEL MECHANICS	43	0 0%	8 38%	10 48%	1 5%	1 5%	1 5%	22

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
094810	AUTOMOTIVE MECHANICS	526	12 4%	90 31%	145 49%	24 8%	11 4%	11 4%	233
094811	AUTO MECHANICS - IMPORTED AUTOS	11	0 0%	1 11%	3 33%	1 11%	4 44%	0 0%	2
094820	AUTO BODY & FENDER	138	3 3%	17 20%	52 60%	8 9%	3 3%	3 3%	52
094830	SMALL ENGINE REPAIR	23	1 5%	4 20%	8 40%	2 10%	3 15%	2 10%	3
094831	MOTORCYCLE REPAIR	19	0 0%	1 9%	9 82%	0 0%	0 0%	1 9%	8
095000	AIRCRAFT MAINTENANCE	20	0 0%	1 13%	2 25%	2 25%	2 25%	1 13%	12
095011	AIRCRAFT PRODUCTION	4	0 0%	0 0%	2 100%	0 0%	0 0%	0 0%	2
095020	AIRCRAFT MECHANICS - POWERPLANT	6	0 0%	0 0%	3 100%	0 0%	0 0%	0 0%	3
095040	AIRCRAFT ELECTRONICS	5	0 0%	0 0%	4 80%	0 0%	1 20%	0 0%	0
095200	CONSTRUCTION - GENERAL BUILDING	29	0 0%	6 35%	10 59%	0 0%	0 0%	1 6%	12
095210	CONSTRUCTION - CARPENTRY	6	0 0%	1 33%	2 67%	0 0%	0 0%	0 0%	3
095250	MILL & CABINET TECHNOLOGY	25	0 0%	1 7%	11 73%	2 13%	1 7%	0 0%	10

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
095300	DRAFTING TECHNOLOGY	326	1 1%	44 28%	84 53%	24 15%	2 1%	5 3%	166
095310	ARCHITECTURAL TECHNOLOGY	54	0 0%	8 24%	14 42%	9 27%	2 6%	0 0%	21
095351	DESIGN DRAFTING - PRESSURE PIPING	7	1 25%	1 25%	2 50%	0 0%	0 0%	0 0%	3
095604	MANUFACTURING TECHNOLOGY	27	1 4%	20 80%	4 16%	0 0%	0 0%	0 0%	2
095610	METALLURGICAL TECHNOLOGY	7	0 0%	2 33%	1 17%	2 33%	0 0%	1 17%	1
095611	CHROME PLATING & METAL FINISHING	1	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1
095620	STRUCTURAL STEEL FABRICATION	7	1 20%	3 60%	1 20%	0 0%	0 0%	0 0%	2
095630	MACHINE TOOL TECHNOLOGY	119	6 9%	26 40%	23 35%	6 9%	3 5%	1 2%	54
095637	MACHINE TOOL - NUMERICAL CONTROL	16	0 0%	5 63%	1 13%	2 25%	0 0%	0 0%	8
095650	WELDING & CUTTING	164	1 1%	40 37%	45 42%	9 8%	10 9%	3 3%	56
095680	INDUSTRIAL QUALITY CONTROL	13	0 0%	10 83%	1 8%	0 0%	0 0%	1 8%	1
095681	NONDESTRUCTIVE TESTING	8	0 0%	0 0%	2 50%	2 50%	0 0%	0 0%	4

090000 ENGINEERING & RELATED TECHNOLOGY 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
095700	CONSTRUCTION TECHNOLOGY	19	3 20%	5 33%	4 27%	2 13%	1 7%	0 0%	4
095710	CONSTRUCTION MANAGEMENT	56	0 0%	9 33%	15 56%	3 11%	0 0%	0 0%	29
095720	CONSTRUCTION TECHNOLOGY	4	0 0%	0 0%	2 100%	0 0%	0 0%	0 0%	2
095810	WATER & WASTE WATER TREATMENT	22	0 0%	5 45%	5 45%	1 9%	0 0%	0 0%	11
	TOTALS	2434	30 2%	490 35%	624 45%	165 12%	56 4%	36 3%	1033

100000 FINE & APPLIED ARTS 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
101100	PHOTOGRAPHY	55	1 3%	3 8%	22 55%	2 5%	9 23%	3 8%	15
	TOTALS	55	1 3%	3 8%	22 55%	2 5%	9 23%	3 8%	15

120000 HEALTH PROFESSIONS   2404A-7A LEAVERS   AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED: JOB IS RELATED	EMPLOYED: JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED: SEEKING WORK	UNEMPLOYED: NOT SEEKING	UNKNOWN
120310	**NURSING - REGISTERED NURSE**	**92**	**0** **0%**	**36** **63%**	**7** **12%**	**12** **21%**	**0** **0%**	**2** **4%**	**35**
120320	**LICENSED VOCATIONAL NURSE**	**32**	0 0%	5 33%	2 13%	2 13%	3 20%	3 20%	17
120330	NURSES AIDE	37	0 0%	4 22%	4 22%	8 44%	1 6%	1 6%	19
120370	MEDICAL ASSISTING	54	4 9%	6 14%	23 53%	2 5%	4 9%	4 9%	11
120410	DENTAL ASSISTING	27	2 14%	5 36%	4 29%	1 7%	2 14%	0 0%	13
120420	DENTAL HYGIENE	5	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	5
120521	MEDICAL EQUIPMENT TECH - MICROSCOPY	7	0 0%	3 50%	1 17%	1 17%	1 17%	0 0%	1
120730	RESPIRATORY THERAPY	2	0 0%	0 0%	0 0%	0 0%	0 0%	1 100%	1
120910	OPTICAL TECHNOLOGY	8	0 0%	4 67%	2 33%	0 0%	0 0%	0 0%	2
121220	PHYSICAL THERAPY ASSISTANT	3	0 0%	2 67%	1 33%	0 0%	0 0%	0 0%	0
121510	MEDICAL RECORDS T-ECHNOLOGY - CANCER	4	0 0%	0 0%	1 50%	0 0%	1 50%	0 0%	2
123900	PSYCHIATRIC TECHNICIAN	20	0 0%	6 100%	0 0%	0 0%	0 0%	0 0%	14

120000 HEALTH PROFESSIONS   2404A-7A LEAVERS   AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
125010	PARAMEDICAL TECHNICIAN	13	0 0%	3 33%	6 67%	0 0%	0 0%	0 0%	4
125020	EMERGENCY MEDICAL TECH - AMBULANCE	46	0 0%	9 43%	7 33%	4 19%	1 5%	0 0%	25
	TOTALS	350	6 3%	83 41%	58 29%	30 15%	13 6%	11 5%	149

130000 CONSUMER EDUCATION & HOME ECONOMICS 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
130300	**CLOTHING & TEXTILES**	8	0 0%	0 0%	1 17%	3 50%	2 33%	0 0%	2
130310	**CLOTHING & DESIGN**	6	0 0%	1 17%	2 33%	0 0%	1 17%	2 33%	0
130320	FASHION MERCHANDISING	59	0 0%	12 30%	19 48%	5 13%	0 0%	4 10%	19
130620	DIETETICS	72	0 0%	9 21%	23 53%	5 12%	1 2%	5 12%	29
	TOTALS	145	0 0%	22 23%	45 47%	13 14%	4 4%	11 12%	50

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED JOB IS RELATED	EMPLOYED JOB NOT RELATED	ATTENDS COLLEGE	UNEMPLOYED SEEKING WORK	UNEMPLOYED NOT SEEKING	UNKNOWN
140110	LEGAL ASSISTING	15	0 0%	5 50%	3 30%	1 10%	0 0%	1 10%	5
	TOTALS	15	0 0%	5 50%	3 30%	1 10%	0 0%	1 10%	5

160000 LIBRARY SCIENCE 2404A-7A LEAVERS AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
160110	**LIBRARY TECHNOLOGY**	**5**	**0**	**3**	1	**0**	**0**	**0**	1
			0%	**75%**	**25%**	**0%**	0%	**0%**	
	TOTALS	**5**	**0**	**3**	1	0	0	**0**	1
			0%	**75%**	**25%**	**0%**	**0%**	0%	

210000 PUBLIC AFFAIRS & SERVICES 2404A-7A LEAVERS · AGGREGATED BY PROGRAM

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
210500	ADMINISTRATION OF JUSTICE	487	7 2%	100 33%	145 47%	38 12%	10 3%	7 2%	180
210550	ADMINISTRATION OF JUSTICE - ACADEMY	66	0 0%	31 82%	1 3%	2 5%	4 11%	0 0%	28
210700	HUMAN SERVICES	1	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1
210720	EARLY CHILDHOOD EDUCATION	291	2 1%	102 52%	53 27%	19 10%	6 3%	16 8%	93
210750	INSTRUCTIONAL AIDE - CLASSROOM	18	0 0%	12 75%	4 25%	0 0%	0 0%	0 0%	2
210754	INSTRUCTIONAL AIDE - SPECIAL ED	16	4 36%	3 27%	4 36%	0 0%	0 0%	0 0%	5
210760	RECREATION ASSISTANT	27	0 0%	2 13%	10 67%	2 13%	0 0%	1 7%	12
213300	FIRE CONTROL TECHNOLOGY	125	0 0%	35 41%	41 48%	5 6%	3 4%	1 1%	40
	TOTALS	1031	13 2%	285 43%	258 39%	66 10%	23 3%	25 4%	361

TOP CODE	PROGRAM TITLE	UNIVERSE	MILITARY SERVICE	EMPLOYED		ATTENDS COLLEGE	UNEMPLOYED		UNKNOWN
				JOB IS RELATED	JOB NOT RELATED		SEEKING WORK	NOT SEEKING	
300210	**FOOD SERVICES -** CHEF TRAINING	15	0 0%	5 63%	2 2[illegible]	0 0%	1 13%	0 0%	7
300250	FOOD SERVICES - RESTAURANT MGMT	20	0 0%	6 46%	3 23%	1 8%	1 8%	2 15%	7
300400	ADMINISTRATIVE HOUSEKEEPING	6	0 0%	1 33%	1 33%	0 0%	1 33%	0 0%	3
300700	COSMETOLOGY	61	5 13%	4 11%	19 50%	7 18%	3 8%	0 0%	23
300930	TRAVEL AGENCY OPERATIONS	193	0 0%	41 39%	40 38%	7 7%	6 6%	12 11%	87
	TOTALS	295	5 3%	57 34%	65 39%	15 9%	12 7%	14 8%	127
TOTAL FOR ALL PROGRAMS		9182	105 2%	2153 37%	2348 41%	679 12%	269 5%	227 4%	3401

COST ESTIMATE FOR OCCUPATIONAL STUDENT FOLLOW-UP IN A CALIFORNIA COMMUNITY COLLEGE

At the request of the Chancellor's Office staff, the cost of conducting student follow-up in California Community Colleges has been estimated from this field test. The cost estimate is based upon the assumption that the procedures for student follow-up we have recommended in this report will be used. The estimate is based upon a college with 200 intermediate and advanced classes offered each semester (SAM B and C priority classes).

No estimate is made for project management since this cost is likely to vary considerably from college to college. The one time development costs for computer programming are also excluded from this estimate.

Budget Category		Estimated Cost
CLASSROOM SURVEY		
2300 Clerical Salaries		
$1200.00	6000 Survey forms x .20 cents for data entry of the forms	
4600 Supplies		
$60.00	400 Classroom Envelopes x .15 cents	
$20.00	400 Envelope labels x .05 cents	
$360.00	400 Classes x 15 students x 6 cents for questionnaires	
Total for this activity		$1640.00

Budget Category			Estimated Cost
FIRST MAILING			
2300 Clerical Salaries			
$252.00	2520	Employment survey forms x .10 cents to prepare for mailing	
4600 Supplies			
$1008.00	5040	Stamps x .20 cents	
$302.40	5040	Envelopes x .06 cents	
$151.20	2520	Employment survey forms x .06	
Total for this activity			$1713.60
SECOND MAILING			
2300 Clerical Salaries			
$189.00	1890	Employment survey forms x .10 cents to prepare for mailing	
4600 Supplies			
$756.00	3780	Stamps x .20 cents	
$226.80	3780	Envelopes x .06 cents	
$113.40	1890	Employment survey forms x .06	
Total for this activity			$1285.20
THIRD MAILING			
2300 Clerical Salaries			
$141.80	1418	Employment survey forms x .10 cents to prepare for mailing	
4600 Supplies			
$567.20	2836	Stamps x .20 cents	
$170.16	2836	Envelopes x .06 cents	
$ 85.08	1418	Employment survey forms x .06	
Total for this activity			$964.24

Budget Category	Estimated Cost
EMPLOYMENT SURVEY - DATA ENTRY	
2300 Clerical Salaries	
$157.50 630 First mailing data entry x .25 cents	
$118.25 473 Second mailing data entry x .25 cents	
$88.75 355 Third mailing data entry x .25 cents	
Total for this activity	$364.50
	Total Cost $5967.54

ERIC Clearinghouse for Junior Colleges
OCT 4 1985